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ABSTRACT

The VISIONS project, a workplace literacy program held in two manufacturing plants and a regional medical center, was conducted during an 18-month period from July 1, 1993 to December 31, 1994. During the project, staff were hired and trained, task analyses and orientation sessions were held, and tests and curricula were developed. Employees were recruited and some were mandated to attend. Instruction was planned to occur in 4 cycles of 13 weeks each with students attending class 4 hours per week in 2-hour segments, using materials related to their jobs. Courses were developed on the following subjects: reading, mathematics, and chemistry for a cement manufacturer; vocabulary, numbers and charts, English and writing, reading strategies, conflict resolution, and communication skills for a hospital; and communications and problem solving, increasing word power and mathematical problem solving, reading blueprints, and statistical process control for an automotive assembly plant. During the project, 294 students were served, and all the sites indicated a willingness to carry on the project. Evaluation of the project showed that 99 percent of the students experienced a gain in skills, based on pre- and posttests, and many gained better job attitudes and became more self-sufficient. Recommendations were made to make the classes mandatory so that students would gain sufficient basic skills to learn the class materials. On-site evaluations were conducted at each of the projects, and comments from students and instructors were recorded. (The report includes these attachments: participant demographics, comments of participants, summaries of private interviews, task analyses, the retention plan, and an external evaluation report.) (KC)

ED 379 511

VISIONS
for GREATER EMPLOYMENT OPPORTUNITIES

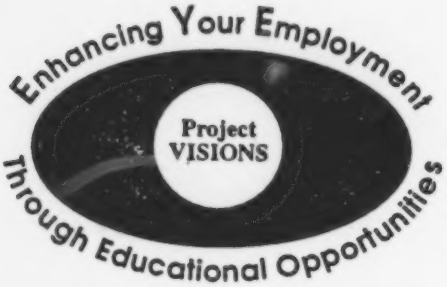
Orangeburg-Calhoun Technical College

in partnership with

Orangeburg-Calhoun Literacy Council

on the sites of

Holnam, Inc.
The Regional Medical Center
United Technologies-Automotive



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FINAL REPORT

February, 1995

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VISIONS

Final Report

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Retention Plan

PROJECT OVERVIEW

VISIONS for Greater Employment Opportunities

Orangeburg-Calhoun Technical applied for a U.S. Department of Education workplace literacy grant in the fall of 1992 to operate a basic skills program for employees of three quite divergent industries. Those industries were a hospital, The Regional Medical Center of Orangeburg and Calhoun Counties; Holnam, a cement and mining operation; and United Technologies, an automobile assembly plant. Two of the industries were located in extremely rural areas--Holly Hill, and St. Matthews . The hospital, while located the county seat of the larger county served, Orangeburg, S.C., is located in a much more populous area but is still located in a small Southern town. All industries are dependent on their present employees because of the lack of new residents moving into extremely rural areas. To stay productive, employees at the selected industries must stay abreast of new technology. If they do not do so, they run the risk of losing their jobs or worse yet, having their plants relocate or close. Because of the low number of plants in these rural areas, residents are dependent on these industries for their well being. They do not have the educational levels to apply for more technical jobs that have become available in the larger towns such as Orangeburg, nor do they have the means to transportation to get to the larger urban areas. It was essential to their survival to have upgrading skills offered at the plant sites. Years of inferior educational opportunities, coupled with leaving school to farm, left many of them educationally deficient.

A grant award letter was received in May of 1993 for $381,653 from the U.S. Department of Education with a match of $146,681 from the partnership and site participants. Other partners in the grant were Orangeburg-Calhoun Literacy Council and the Greater Santee Literacy Council. The grant objective was to serve 250 participants over an 18 month period. Three full-time instructors were hired, one located at each site; a part-time counselor, shared by the three sites; an administrative assistant was housed at the technical college; and a full time project director who was housed at the technical college but who travelled weekly to each site.

The major thrust of the program was to provide basic skills instruction in the context of the employees' jobs, not teaching the jobs but focusing on the embedded basic skills needed to perform more efficiently or to gain a promotion in one's job. A comprehensive literacy task analysis was conducted at each job site and the resulting competency-based curricula have been a vital addition to each industry.

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The start-up period of the grant was 90 days and in that time period, personnel was hired, staff training was conducted on all aspects of workplace literacy, consultations and planning sessions were held with management at each site, recruitment and orientation of supervisors and students was conducted and curricula was developed form the task analyses performed. The project also included support services to students and barriers to attendance in classes were determined and addressed.

The anticipated results of the project were increased productivity, improved worker morale, a better understanding of the goals of the workplace and an appreciation for lifelong learning. Although each site was different in their culture and their specific needs, a common approach was used at all sites--that of oral learning using the whole language approach and cooperative learning. The instructors used metacognitive and modelling strategies to impart learning. It was anticipated that the "social" nature of the classes would create a cooperative and supportive atmosphere in the classes and would lessen the number of dropouts that plague adult education programs.

PROJECT SUMMARY

The project was conducted during an 18- month grant period, from July 1, 1993, to December 31, 1994. After a three- month startup period, classes began at the three sites on September 7, 1993. During the startup period, staff was hired, trained, performed task analyses, orientations to management and to employees, developed tests and curricula. Needs assessments were conducted at each site and recruitment plans were made and carried out. Because each industry supported the grant in differing degrees, various methods of recruiting were conducted. Recruiting activities ranged from many meetings with small groups of employees to meeting with large groups of employees during their break times. Incentives such as drawing for prizes was conducted at one plant, with another plant handing out apples to employees after endorsing the program and introducing the instructor and project manager to speak to groups of employees. Supervisors at this particular plant took special interest in the program and helped the instructor recruit students by suggesting to the employees how they could benefit from the program. These supervisors also continually had an open forum with the instructor to encourage attendance, offer suggestions for classes, and to give the instructor materials from the job with which to develop curriculum. The third site supported the program from the personnel office and allowed the project staff to talk at an initial supervisor's meeting, but the program was never internalized at the site. However, individual departments supported the classes by offering their employees days off for attending classes and having graduation celebration meals at the end of the cycles. Project staff developed a recruitment packet and hand- delivered them to each department in order to encourage interest in the classes.

Instruction was planned to occur in four cycles of 13 weeks each with the student attending class four hours per week in two hour segments. All sites emphasized that their employees were

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to attend classes on their own time, either before or after work. This fact made initial recruiting efforts difficult. Employees were wondering "What's in it for me. Why should I expose myself to needing help in basic skills when I am not promised anything in return?" It was also difficult to plan curricula which related to the job when the employee's primary reason for coming on his/her own time was for personal reasons, not job related. We overcame this opposition by combining the two concepts. If employees wanted to increase their overall skills to help their children with their homework, we taught them writing, reading and math skills in the context of their jobs.

Not all class sessions lasted the 13 weeks and not all classes were voluntary and off the clock. Some sessions lasted 8 weeks such as the report writing class for security guards at the hospital. Our class lengths were shortened to allow for requests from the particular industry. It is to our credit that at the one industry where no support was seen from supervisors for classes at the beginning of the grant, we were allowed to teach four 25- hour sessions of pre-SPC math on the clock to 63 students. We were in our last cycle at the time and would have been able to serve many more students had the grant not ended. However, the industry chose to continue the classes on their own after the grant ended.

Standardized testing was discussed at the beginning of grant, but due to the refusal of one of the company's head office to permit mandatory testing and the low levels of the students in our classes at the other two sites, it was decided by project staff that standardized testing would only scare our students and not provide us with any useful information. We knew by using Cloze tests and competency-based tests developed by our staff that our students were on low educational levels and there was no chance they could move to a higher level on the Workplace Literacy Test by ETS that we had chosen to give. For those in short programs like the SPC classes, there was no time to give the pre and post test and too little time spent in instruction to make a difference. In fact, for several reasons, I wonder if it is prudent to include standardized testing as part of a workplace literacy program . For one thing, there may be very little transfer from job-specific to a general literacy test and most important of all, students do not spend enough instructional time to improve themselves enough to show gains on a pre and post standardized test. That is why the new 3 year grants may give more time, if the students cooperate by attending enough hours, to study the effect of job specific instruction on overall literacy gains.

The instructional focus of the classes throughout the three sites was to use an open format, whole language approach with cooperative learning techniques. Since students would be on varying levels, they could divide into small groups and work on job related basic skills instruction. Throughout the project, this focus proved successful, with a dropout rate of only 15% for the entire project. In fact, 294 number of students attended the four cycles with a retention rate of 85%. Many students attended more than one cycle, however, the 294 students served, is only counting employees one time. Actually, 481 students attended the four cycles with 368 of them completing and 33, participating. It was decided at the beginning of the project to count completers as having attended 75% of the class sessions and participators from 50 to 75%.

This represents quite a commitment on the part of employees who were, in the most part, attending on their own time. Nationally, adult ed programs count as completers those who have completed only 12 hours of training. Our sessions required as least 29 hours for completion. In total, students attended 6493 hours of classes with an average attendance per person of 28.2 hours. Of the persisters, or those who attended at least 45 hours, average hours of attendance were 50.5. Only 47 or 15% of the students were persisters.

The evaluation of the project included evaluation of the four cycles by an outside evaluator, Karl Haigler. The project staff also developed pre/post supervisor forms to evaluate the employee on productivity, attendance, job attitude, job knowledge, and quality of work. A supervisor evaluation form of program effects on their departments was given to each supervisor and summed for all sites. Each cycle, a student evaluation of instruction, an employer satisfaction form, class monitoring form were circulated , summarized and presented to all partners. In addition, the counselor met with those students who dropped classes to encourage them to reenter and collected their reasons for leaving class on an exit form. Persisters in class were surveyed to determine why they persisted in their studies by attending more than one cycle. Other evaluative methods included interviewing management and students at the end of the project on the effects on productivity, promotion, and desire for continuing their educations. Summaries of the evaluation methods used are included in the attachments.

Changes in key personnel during the grant affected class offerings and attendance hours. During the course of the grant, three full time teachers and one part time counselor resigned their positions. Two of the instructors were at the same site but at different times (United Technologies) which resulted in a delay in starting two cycles. A shortened cycle of 20 hours was held during Cycle 2 and an extension of three weeks was included in Cycle 4 to accomodate loss of instructional time. The other instructor, located at the hospital site, remained on the job until the new position was filled. The project director was able to find very qualified staff to replace those who had left, but due to the requirement of developing new curricula for each cycle, the new instructor had to learn the ways of the workplace, become familiar with workplace literacy, recruit students unfamiliar to them and develop curriculum. Since needs surveys had been previously done with employees, they were quickly able to determine course content attractive to the students. Task analyses already collected were also of considerable use. It would be a good point here to comment on the shortness of the startup period and how it affected later stages of the grant. Since the startup period was only three months and staff started work during the second month, they had only two months to be trained in workplace literacy and to do all the other things that ready a program to be implemented. Therefore, they had little time to plan curricula that would carry them across four cycles of instruction. Although the cycles had three week breaks between them, this was entirely too short a time period to plan competency-based testing, course outlines, do recruitment, develop curricula and write cycle final reports. Also, only on two occasions did the industries tell us what to develop--the chemistry course at Holnam and the SPC Simplified course at United Technologies. Had we known this at the outset, we could have developed these courses during the startup period and offered then to more employees. As it was, they were offered in the last cycle and few employees were served

due to the time constraint of the grant ending.

CURRICULUM

Curricula based on literacy task analyses of the various jobs at the three sites were developed. In all sites, job task analysis were performed on the jobs indicated by management to be in need of literacy services. At one of the sites this proved a pleasant challenge since the company was interested in cross training their employees and the employees were very interested in improving themselves. Also as mentioned before, this site encouraged their employees to improve and management offered incentives such as book bags, calculators, notebooks, an 18 piece computer lab for a classroom and pay for attending classes on their own time. The other industrial site, while encouraged by the plant manager for improvement educationally, offered no incentives for participation. Employees had virtually no chance for promotion and classes were held in the plant canteen, complete with other employees on break and frequently interrupted by announcements from the loudspeaker. To compound problems, or so we thought at that time, the plant manager and the personnel manager were replaced suddenly. However, the new plant manager was more adamant about skills training and I believe influenced by the successful Blueprint Reading course we had completed as he arrived, supported our efforts and now requires his employees to complete the SPC course on the clock. Curricula for the hospital was developed individually for certain departments since each department had discrete tasks and different educational levels of employees. For example, environmental services workers did not need to know report writing. Workshops in Conflict Resolution and Communication Skills were conducted at the request of hospital department heads.

Curricula developed was also supported by bought materials. Particularly outstanding were a math computer program put on the land system at Holnam, video materials purchased for the chemistry class, and other books and workbooks purchased for supplemental use. All curricula developed for the classes were original for that site. The supplemental materials were used to augment instruction and aid those who may have needed more help. Instructors also tutored students individually either in relation to the class or in an area in which they needed particular help at work, such as report writing or speaking before a group. Although our lower level students were referred to adult education for one-on-one tutorial help, they were reluctant to accept this outside help. Adult Education did set up a GED class at Holnam where many of the employees were without a high school diploma, but only 8 students took advantage of the classes. Curricula highlights include a basic chemistry course developed for cement workers at Holnam which included a history of cement and hands on chemistry experiments involving cement. For many of the employees, this was their first foray into the lab at work and they began to understand what factors were involved in producing a better product. Other classes at Holnam involved the teaching of basic skills in the context of the job task analyses of many jobs across the plant. The inclusion of forms and materials across a wide range of jobs further developed the concept of cross training which was the focus of the grant for Holnam. At United Technologies, curricula was developed in math, reading and writing related to the job, blueprint reading and pre skills for SPC. At the hospital, the Environmental Services group attended all

four cycles and started with basic vocabulary, basic reading skills, numbers and charts which included hands on training in mixing cleaning materials, and then on to strategic or high performance reading. Two curriculum specialists and the instructors combined forces to produce the following job-specific materials:

HOLNAM, INC. - Manufacture Portland Cement

Reading and Math to Increase Knowledge in Cement Industry
Four Additions: Forms from the Job, Packhouse Math, Military Time, Workplace Development of Vocabulary

Basic Chemistry for the Cement Industry

THE REGIONAL MEDICAL CENTER

Vocabulary Skills

Numbers and Charts - Improving Math Skills For The Workplace

English/Writing - Improving Writing Skills For The Workplace

Basic Reading Strategies

Basic Reading Strategies II

Conflict Resolution Workshop

Communication Skills Enhancement Workshop

UNITED TECHNOLOGIES - AUTOMOTIVE ASSEMBLERS

Communications and Problem Solving

Increasing Word Power and Mathematical Problem Solving

Basic Strategies in Reading Blueprints For UT Workers

Statistical Process Control - Simplified

CHARACTERISTICS OF PROGRAM PARTICIPANTS

Workers who enrolled at the three sites were extremely divergent. Workers at Holnam, a mining company, were predominately black men. Workers at United Technologies, an automobile assembler, were predominately black women and workers at the hospital were mixed, but of those who regularly attended our classes, they were older black women. The demographics for all sites when combined together give a different perspective. That is due to the fact that those attending certain classes such as chemistry and workshops were more educated, although the classes were opened to anyone who was interested. In the basic classes where the persisters attended, 90% of hospital environmental services workers did not have a high school diploma, 50% of Holnam workers did not and only 4% at United Technologies. United Technologies had younger and more single parents which may have contributed to their higher dropout problems. The hospital workers were older, more settled individuals who were the most persistent attendees. The contrast between the three sites also emerged when we gave a persisters form on why they had persisted in coming to class. The United Technologies persisters listed social reasons as most important, while the Holnam men listed that as unimportant and knowledge in job areas as very important because they believed that their jobs were in transition. On the other hand, United Technologies' workers were in classes to find another job. This factor has much to do with the climate at the plant site to which I have alluded before. I bring up the differences between sites as being very important to recruitment and retention techniques used by the staff. The differences between sites some how gets lost when all the demographics are compiled together. The summary of the Persisters Survey is located in the attachments.

The following graphs depict the demographics by site first, then as a group. Generally speaking, more educated people volunteer for further education, a fact that has been borne out by data from adult educational research. During the grant, only 15% of those students served did not have a high school diploma, a fact that needs to be considered in recruitment activities for any grant. Averaged together, the workers who attended our classes were black (62.2%), female (67%) married (64.6%), age 26-40 (48.3%) with a high school diploma (83.2%).

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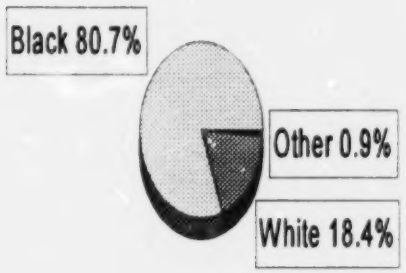
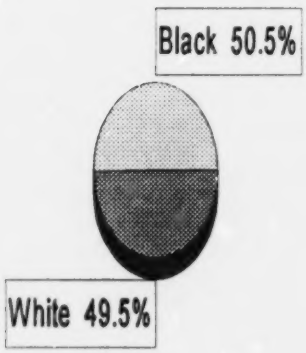
Site Program Enrollment

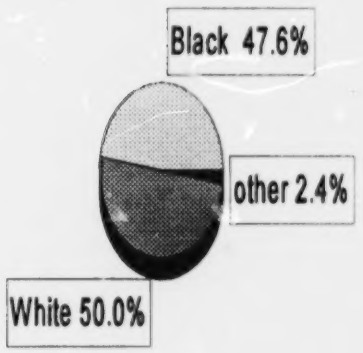
Race



United Technologies



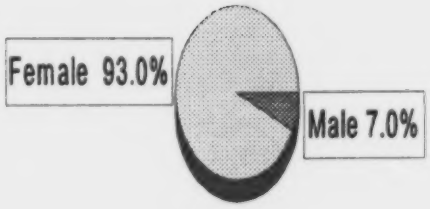
The Regional Medical Center



Holnam, Inc.

Site Program Enrollment

Gender



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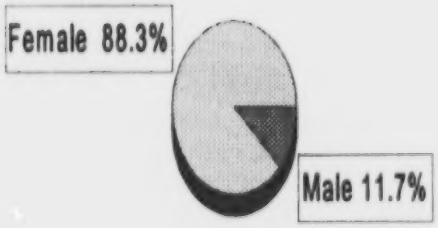
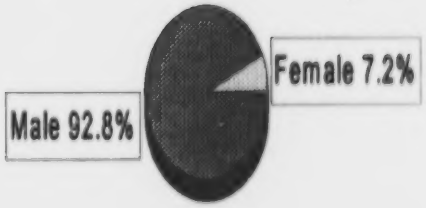


The Regional Medical Center



Holnam, Inc.

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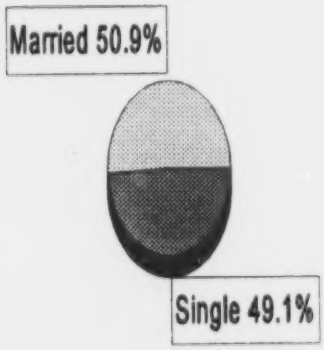
Site Program Enrollment

Marital Status



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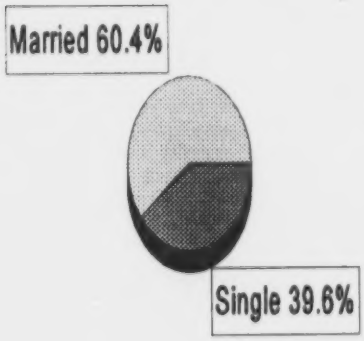

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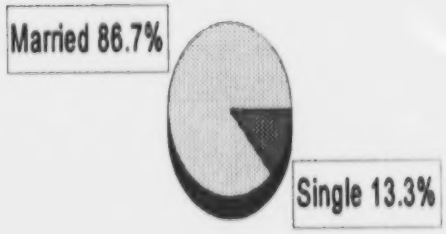
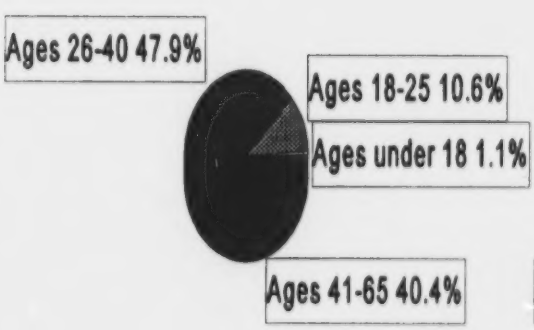


Holnam, Inc.

Site Program Enrollment

Age

United Technologies



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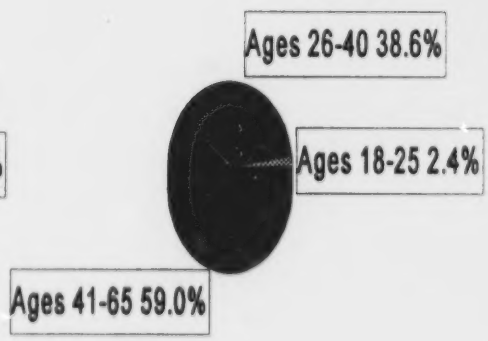
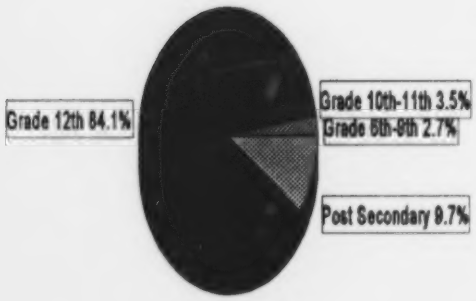


Holnam, Inc.

Site Program Enrollment

Educational Level



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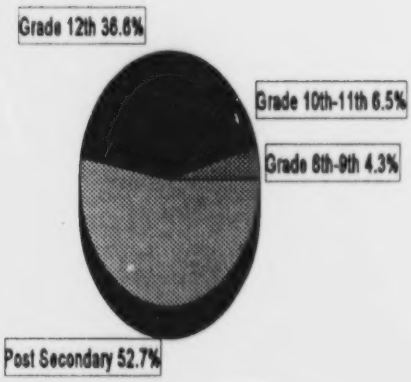

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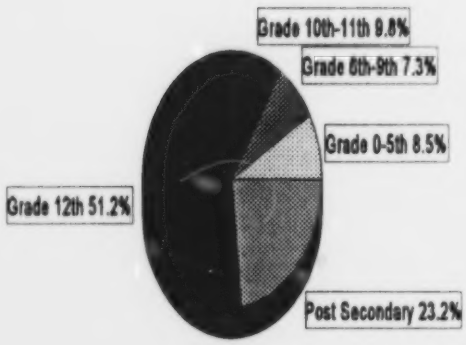
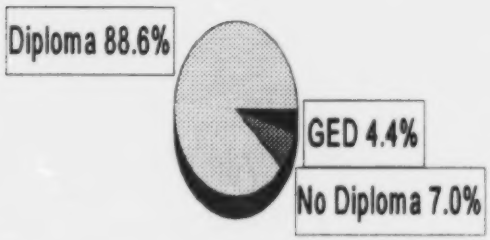


Holnam, Inc.

Site Program Enrollment

Educational Status



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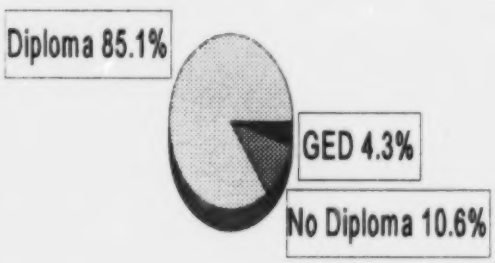

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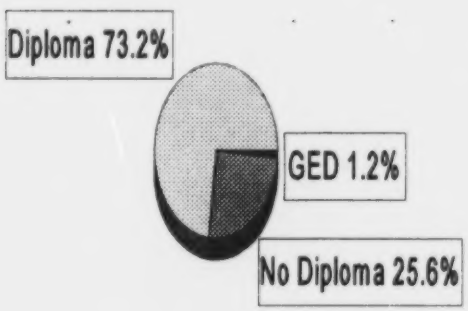
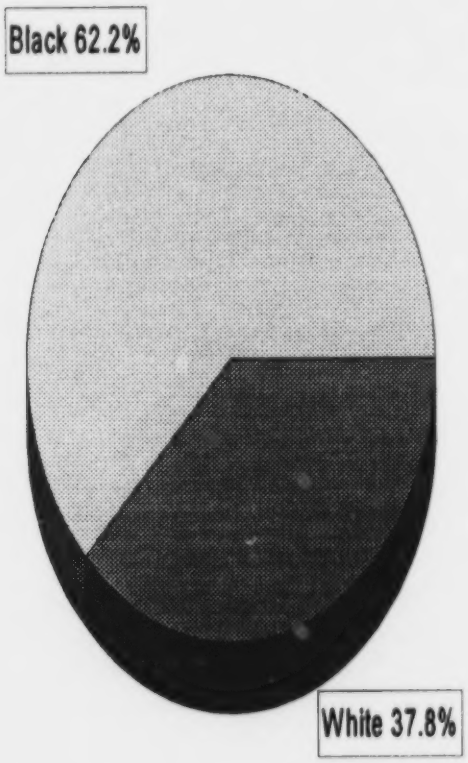


Holnam, Inc.

Total Program Enrollment

Race



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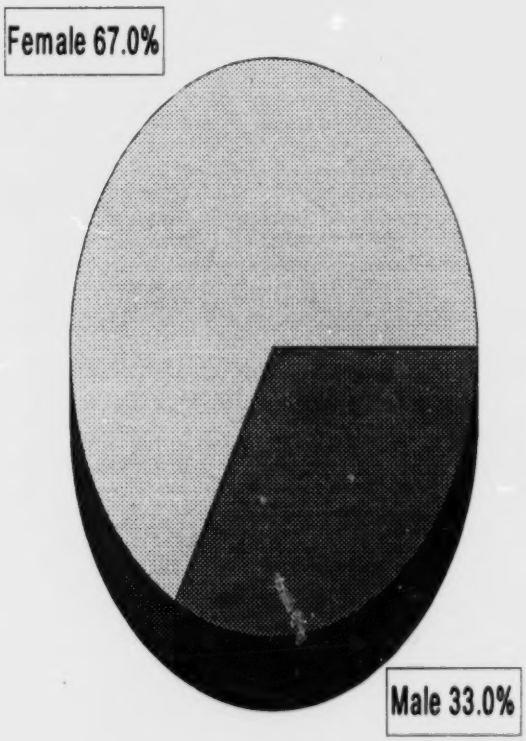
Total Program Enrollment

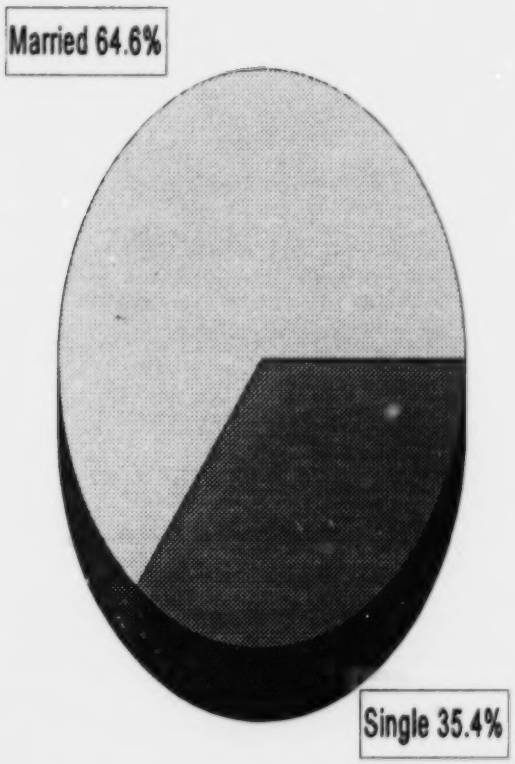
Gender



8h

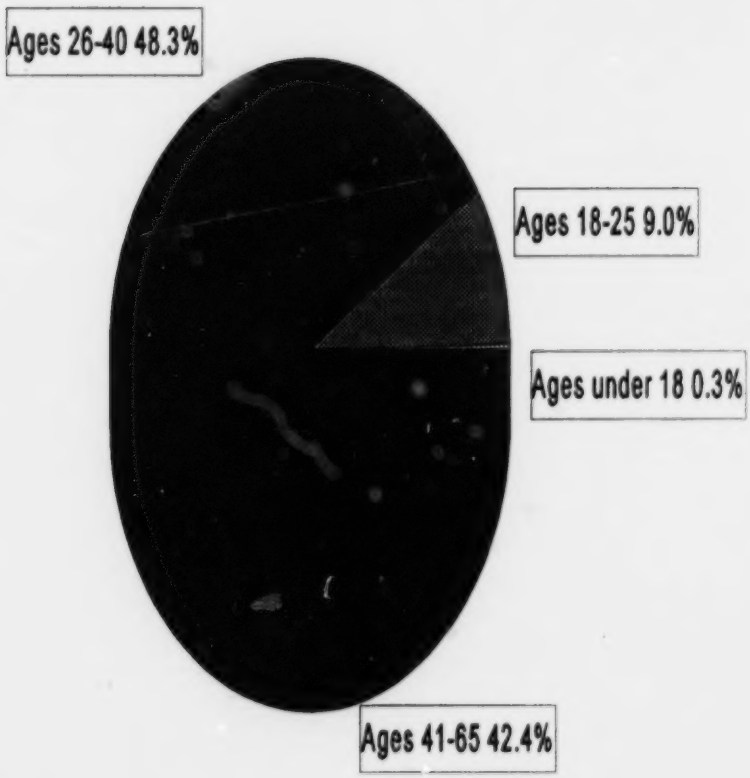
Total Program Enrollment

Marital Status



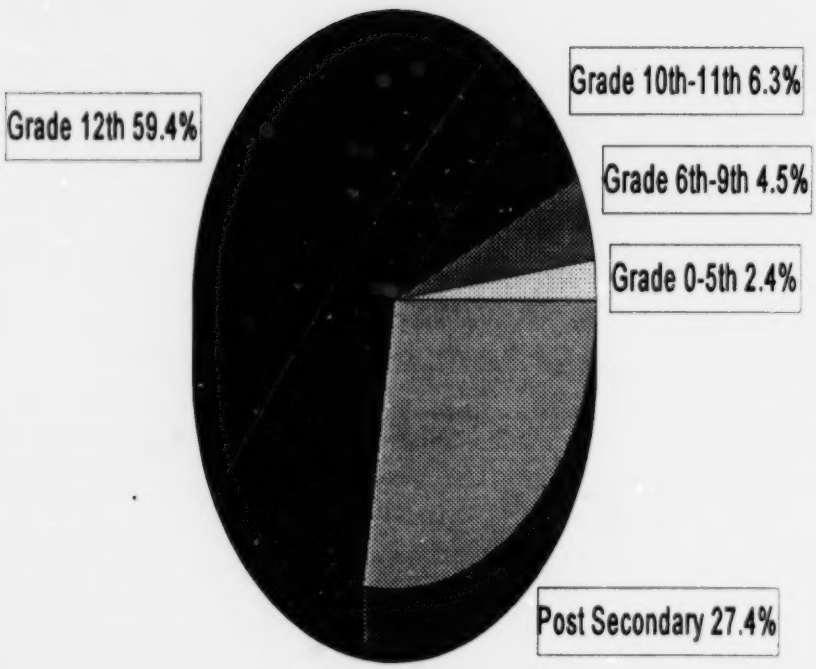
Total Program Enrollment

Age



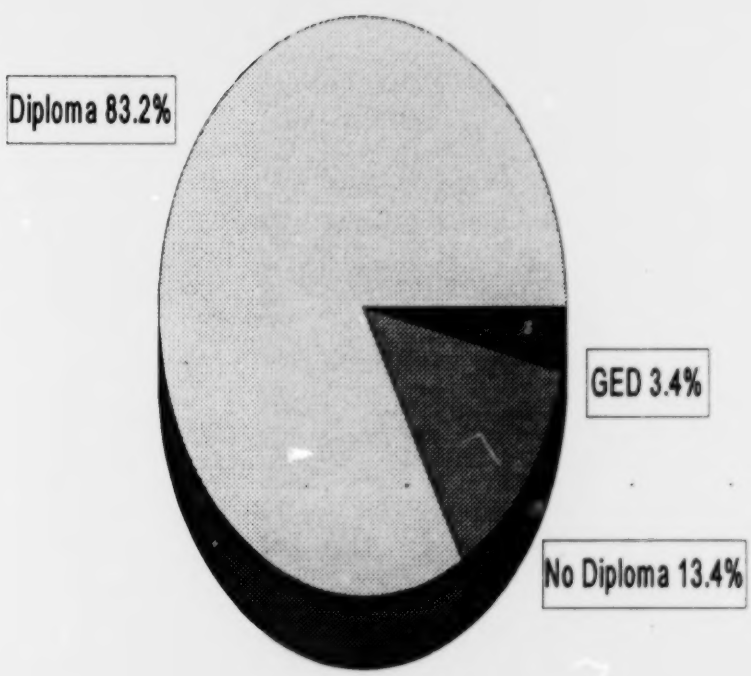
Total Program Enrollment

Educational Level

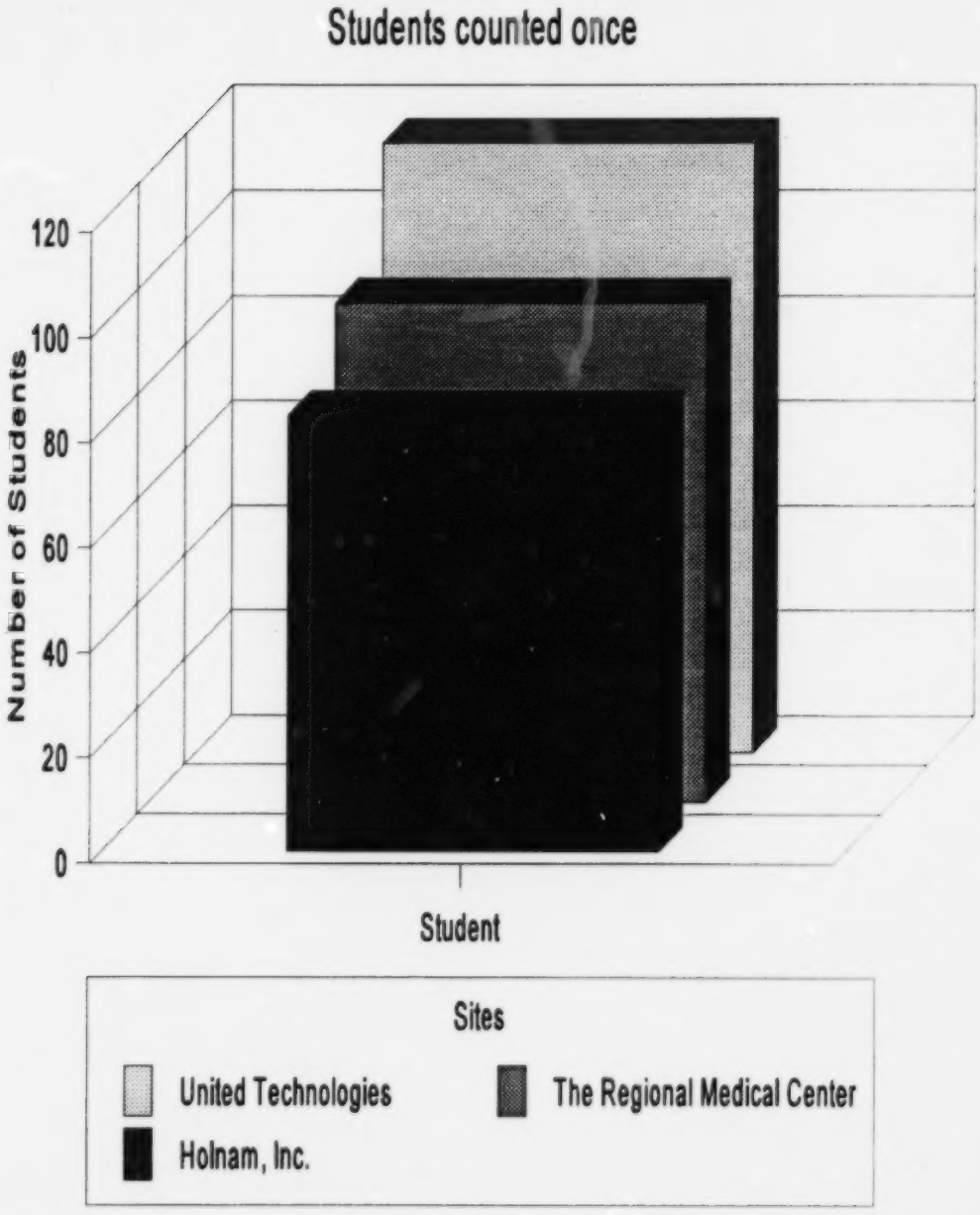


Total Program Enrollment

Educational Status



Total Served at Each Site



8m

OBJECTIVES, ACCOMPLISHMENTS, AND OUTCOMES

OBJECTIVE I:
By September of 1993, to have designed and developed job specific literacy audits and the instructional curriculum.

Performance Evaluation Measure - Objective I:
Literacy audits will be designed, reviewed and approved by the industrial partners, Project Director, Counselor, and instructors. Records will indicate the use of the audits for pre- and post-testing of each participant.

Documentation:
Task analyses were compiled by the instructors and verified by the worker and the supervisor. All the task analyses are on file in the Project Director's office and are copied in the attachments. Instructors completed curricula, complete with course outlines and competency-based tests by the above date. The curricula is included with this report.

Outcome:
Thirteen different curricula were developed for the project and are described and listed under **Curricula** section of this final report.

OBJECTIVE II:
To provide on-going outreach activities which will result in the recruitment, intake and screening of a minimum of 250 eligible applicants to the program by December, 1994.

Performance Evaluation Measure - Objective II:
Records will verify the intake of 250 adult learners. Copies of recruitment activities will be on file in the office of the Project Director.

Documentation:
Enrollment and attendance data for the four cycles recorded in the Project Director's office.

Outcome:
Two hundred and ninety four students registered for classes during the 18 month grant. Students at three sites attended a total of 6493 hours; 1713 at the hospital, 2482 at Holnam, and 2298 at United Technologies. Average hours attended per person were 28.2. Forty seven or 15% of students were identified as persisters (having attended more than one session). Ninety percent of students in the Environmental Services classes were persisters, 7% at United Technologies, and 50% of Holnam's basic CEMENT class.

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OBJECTIVE III:
To provide instructional activities which will result in new employment, continued employment, career advancement, or increased productivity; and/or upgrade of basic skills required by changes in the workplace; and improved competencies in speaking, listening, reasoning, and problem solving by 90 percent of the project participants.

Performance Evaluation Measure - Objective III:
Records will reflect that 250 adult learners participated in instructional activities. Ninety percent of participants exhibited improved competence in listening, reasoning and problem solving.

Documentation:
1. Enrollment forms
2. Pre and Post competency-based test results
3. Supervisor Pre/Post Employee Ratings
4. Supervisor Overall Effect on Department Survey
5. Supervisor/Management Interviews
6. Plant data
7. Student Interviews/Student Evaluation of Instruction

All documentation summaries are based on information filed in the Project Director's office and are included in the attachments.

Outcome:
Enrollment forms and individual student files are on record in the Project Director's office.

Outcome:
99% of students who took a competency-based assessment showed improvement on their scores as indicated on Pre/Post increases determined by each instructor for each course developed.

Outcome:

Supervisor Pre and Post Program Employee Rating

Summary Comments
Pre/Post Supervisor's Evaluation Forms measuring employee job attitude, productivity, quality of work, attendance, and job knowledge were handed to each supervisor to complete on employees. They were instructed to complete a pre-form prior to the start of classes and a post-form after the grant period ended or at the end of a specific class (example: report writing for security). As reflected in the following chart, supervisor evaluations at Holnam and United Technologies indicated that at least 50% of their employees increased in all areas--an interesting statistic since the supervisors did not have in their possession how they pre-evaluated the individual. Particularly impressive is the percent of employees who increased in attitudes toward their job, 54% at Holnam and 60% at United Technologies. Also noteworthy was the increase in job knowledge, 66% at Holnam and 50% at United Technologies.

Summative Results of Supervisor Pre/Post Comparison of Employee
Percent of Employees Evaluated who Increased from Pre to Post

	Job Attitude	Productivity	Quality of Work	Attendance	Job Knowledge
Holnam	23/42 54%	18/42 42%	18/42 42%	19/42 45%	28/42 66%
United Technologies	12/18 60%	10/18 55%	9/18 50%	2/18 11%	9/18 50%
TRMC	2/22 9%	6/22 27%	5/22 22%	4/22 18%	3/22 13%

Raw score and percent of students who increased between pre and post evaluation.

Results at The Regional Medical Center are not reflective of the progress made because the Environmental Services supervisor did not complete the pre survey until the students had been in class for seven months. The Security supervisor completed his pre survey at the conclusion of the classes and the post at the end of the grant period. In both circumstances, substantial progress had already been made and the difference between pre and post is not substantial. Supervisors were frequently contacted to complete the surveys by grant staff, but did not comply at the necessary time. United Technologies supervisors were also nonchalant about handing in their surveys, hence the low number of responses. Many of the supervisors were replaced or shuffled in a plant restructuring. At both sites, the evaluation was affected by plant personnel changes in management. Also, the percents could have been higher had the supervisors not rated their employees high on the pre-evaluation. It is true that the "best" employees volunteer for classes on their own time.

Recommendations: It is imperative that supervisors understand the importance of handing in evaluation forms. Greater emphasis will be place in the second grant to secure supervisor support by providing special orientation and explanation sessions. Also, the forms will be amended to make them faster to complete.

Outcome:
The summary results for the Supervisors' Evaluation of Program Effects on their Departments show that supervisors rate production as having increased somewhat (64%), quality has improved somewhat (55%), employee better able to handle new equipment (64%), attitude improvement increased some (77%), job as supervisor is somewhat easier (55%). The complete summary is located in the attachments.

Outcome:
Supervisor/Management personal interview comments were highly complimentary. It was noted that there was a better understanding of the workplace as a whole, that employees were taking more responsibility, that production had increased with less manpower, and in general, employees were doing their jobs better. Comments from supervisors are included in the attachments.

Outcome:
Student response was overwhelming for support of the classes. Out of 40 students interviewed, 100% endorsed the value of the classes. One student has received a promotion. Several others are enrolling in higher education or studying to attain their GED's. Student evaluation of instruction indicated that 82% of students surveyed felt they could perform their jobs better and 88% rated the classes as good or excellent. See attachments for actual summaries.

Outcome:
Plant data at Holnam indicated that 1993-1994 was one of the best years the plant has had in production. They went from .39 man hours per ton to .33 man hours. There was also less kiln downtime -- both indicate employees are working more productively.

OBJECTIVE IV:
To provide on-going and learning lab assistance to adult learners in need of educational assistance.

Performance Evaluation Measure - Objective IV:
Records will reflect each tutor will receive training and provide services for 15 months. Records will indicate the number of hours of tutorial assistance provided by the Literacy Councils.

Documentation:
Records kept by instructors and counselor reflect those recommended to tutoring sessions. The Literacy Council and its teachers were invited to staff development training sessions.

Outcome:
Records are on file to show that private tutoring was conducted by the instructor at the hospital for 4 students. Two students at United Technologies were referred to tutors but they did not proceed with the help. Five students at Holnam were referred to tutors but they refused help. This is one area of the grant where there was slippage due to the lack of interest on the students behalf. Students just were not willing to have a tutor. They preferred to remain in classes conducted by the grant rather than use their time to be tutored. They were not willing to participate in both activities.

OBJECTIVE V:

To provide on-going support services to adult learners which will result in the reduction of barriers for adult learners to participate in VISIONS.

Performance Evaluation Measure - Objective V:
Records will indicate the type of services provided and number of individuals receiving services.

Documentation:
Support services were documented monthly by the individual instructor as well as the project counselor.

Outcome:
It was determined by interviewing students that support services were needed in the following areas: childcare at United Technologies, transportation at the hospital, request for information on attending higher education institutions at United Technologies, and GED information at Holnam and the hospital.

Outcome:
The instructor at United Technologies researched childcare opportunities in the area where the plant was located, visited schools in the area that had childcare, brought brochures and parent information to the site and showed her students how to fill out requests.

Outcome:
Transportation problems at the hospital were solved by the instructor and the counselor who talked to the individuals involved and paired people in class who could ride with each other.

Outcome:
The counselor through his monthly reports has indicated he has counseled 35 students on information for applying to institutions of higher learning. He has helped them with applications and financial aid. Two students enrolled in Orangeburg-Calhoun Technical College and one at State University.

Outcome:
The counselor also counselled 15 students in GED preparation. One attended Orangeburg-Calhoun Technical College, two attended Adult Education programs and Adult Education set up a program at Holnam for 8 students.

Note:
Slippage occurred when the original counselor resigned at the end of October and a suitable replacement was not found until March 1. Problems in hiring occurred because of the requirements in the grant for a person with a Masters in Counseling and the abundance of full time jobs for counselors in the area. However, when the counselor began work in March, he was allowed extra work time above his part time hours to catch up on counselling duties.

MAJOR PROJECT OUTCOMES

* two hundred and ninety-four students served

* thirteen different curricula developed

* institutionalization of the program at all sites-- all willing to continue program without grant funds

* the development of individual educational plans (IEP) for each worker registered in the learning programs

* 99% of students experienced a gain in pre to post competency-based testing

* 57% average gain in better job attitude, 58% gain in job knowledge and 50% gain in productivity by participants in the program as reported by supervisors of workers involved in classes

* a gain in management support of basic skills by allowing workers to attend classes on company time

* increasing support among workers for basic skills training evidenced by high attendance numbers in last cycle

* student evaluation of instruction surveys showed an increase, as the grant progressed, that instruction enabled workers to do their jobs better, as ratings went from 72% in the first cycle to 91% in the fourth cycle

* 50 adults learned to use calculators for the first time

* one student in the basic classes bought himself a computer after using basic computer-assisted instruction in classes

COMMENTS AND RECOMMENDATIONS

1. Management support at all levels is essential to the success of any workplace program. One of the keys to management support is communication from grant staff. We communicated by way of monthly and cycle end reports and by meeting with upper management, but we found that our reports were not being copied to supervisors by management. In other words, we were communicating but the company was not passing the information on to those involved in the company. We hope to remedy that situation in the new grant we received by having frequent supervisor orientations and information sharing sessions. A packet of information will be developed to give to each supervisor. It is also felt that management at the industry must take greater responsibility themselves to see that the program is promoted.

2. GED instruction should be permitted as part of the grant. Many workers feel inferior and will not be promoted because they do not have their high school diplomas.

3. Computer instruction should also be permitted in the grant. I do agree that grant funds should not be used to train secretaries on Word Perfect, but we should be allowed to make our students computer literate. Computer classes sound important and not basic and would be a good drawing card to attract those who are ashamed to admit to basic skills deficiencies. Also, at one of the plants served, being able to operate a computer is essential to the cross training that is important to that plant.

3. Those who are more educated are those who volunteer for classes. Mandatory classes held during the work day would alleviate the problem of signing up for classes and allow instructors to get to know and counsel those who need more help. Our cooperative learning techniques and oral learning methods helped assimilate all levels of learners in the same classroom. We had to build trust first before learners would participate in the classes. It was still difficult to attract low level learners to participate at all.

4. The use of oral learning, where we modeled effective learning strategies and used metacognitive or learning to think strategies, seemed to work well and cut down on dropouts. Students enjoyed the social aspects of meeting with their workers and discussing skills across many job functions. Because of constant work shifts and loud noise where they work, they often did not have time to talk with each other. They found it valuable to learn across many jobs at the plant. Supervisors in their evaluation of the project commented that workers had a better understanding of the product they were producing because they were familiar with the other jobs at the plant.

5. The average hours of attendance per person were 28 hours. For persisters, it was 51, but we had only 47 persisters out of 294 students. Therefore, is imperative to teach basic skills needed for a certain job quickly and in the context of the job, for if the worker is coming voluntarily, he/she will not commit much time for basic skills. That is why it is so important for companies to

commit work time for basic skills training instead of letting workers volunteer for classes.

6. The Sticht/Phillipi method of developing and measuring job skills knowledge may not work well in a voluntary basic workplace program. When you have only some workers attend from some lines, they cannot show productivity increases because their whole lines are not involved. Also, when planning curricula for a small plant, one cannot afford to target one area or only a small number of students will be served. Therefore, task analyses of several jobs must be used to develop curricula. Subjects of personal interest to the students must be included in the curriculum since workers are coming on their own time.

7. The survey we conducted showed there were varying reasons why persisters continued with classes. At one site, sociability was important. At another, helping children with homework was important. Persistency seems to be ruled by the demographics at the plant site--age, gender, single parenthood--as it is by the plant culture, whether workers are treated well at the work site and whether they have a good relationship with management. It is important to workplace literacy planners to know what keeps students interested in classes at the specific plant site so that they may offer classes that appeal to the workers. Such information also aids in recruiting students to class.

DISSEMINATION ACTIVITIES

Dissemination Workshop held at Holnam--Statewide literacy people invited
Presenter at Spotlight on Literacy Conference--Charleston, S.C.--May 10-13, 1995

Curricula sent to:

Eric Clearinghouse on Adult, Career and Vocational Education
S.C. State Workplace Resource Center
School to Work Transition Holly Hill High School
Calhoun County High School
Orangeburg School District 5
State Work Force Initiative
Orangeburg County Adult and Continuing Education
Calhoun County Adult Education
Alumax National Workplace Grant
Santee Area Literacy Council
Central Carolina Technical College

Dr. Rebecca Love-Wilkes
Southeast Curr. Cood. Ctr.
Mississippi State University

Attachments

DEMOGRAPHIC CHARACTERISTICS OF PROGRAM PARTICIPANTS (N=294)

AGE:			ETHNICITY:			GENDER:		
<18 yrs. old	1	0%						
18-25 yrs. old	26	9%	White	108	37%	Male	96	33%
26-40 yrs. old	140	48%	Black	178	61%	Female	195	66%
41-65 yrs. old	123	42%	Other	3	1%			

EDUCATIONAL LEVEL:

0-5TH GRADE		6TH-9TH GRADE		10TH-11TH GRADE		12TH GRADE		POST SECONDARY	
7	2%	13	4%	18	6%	171	58%	79	27%

BLACK

0-5TH GRADE		6TH-9TH GRADE		10TH-11TH GRADE		12TH GRADE		POST SECONDARY	
7	4%	11	6%	15	8%	104	58%	37	21%

WHITE

0-5TH GRADE		6TH-9TH GRADE		10TH-11TH GRADE		12TH GRADE		POST SECONDARY	
0	0%	2	2%	3	3%	63	58%	39	36%

OTHER

0-5TH GRADE		6TH-9TH GRADE		10TH-11TH GRADE		12TH GRADE		POST SECONDARY	
0	0%	0	0%	0	0%	2	67%	1	33%

STATUS:			HIGH SCHOOL DIPLOMA		
Married	181	62%	YES	241	82%
Single	99	34%	NO	39	13%
			GED	10	3%

BLACK/HS DIPLOMA			WHITE/HS DIPLOMA			OTHER/HS DIPLOMA		
YES	141	79%	YES	94	87%	YES	3	100%
NO	33	19%	NO	6	6%	NO	0	0%
GED	2	1%	GED	8	7%			

Please note: Not all participants reported data in all categories; therefore, all do not total 100%.

VISIONS

INSTRUCTORS' CLASS HOURS DAILY

CYCLE I

	TRMC Office 533-2852 Class 533-2558		HOLNAM Office 496-5027 ext. 280 Class ext. 241		UT Office 536-6964
MONDAY	8:30 - 11:30am	office	8:30 - 11:45am	office	9:00 - 3:30pm office
	11:30 - 12:30pm	lunch	11:45 - 12:45pm	lunch	
	12:30 - 5:00pm	class	12:45 - 5:15pm	class	3:15 - 5:15pm class
TUESDAY	8:30 - 11:30am	office	8:30 - 5:00pm		9:00 - 3:30pm office
	11:30 - 12:30pm	lunch	or		
	12:30 - 5:00pm	class	9:00 - 5:30pm	office	3:45 - 5:15pm class
WEDNESDAY	8:30 - 11:30am	office	8:30 - 11:45am	office	9:00 - 3:30pm office
	11:30 - 12:30pm	lunch	11:45 - 12:45pm	lunch	
	12:30 - 5:00pm	class	12:45 - 5:15pm	class	3:45 - 5:15pm class
THURSDAY	8:30 - 11:30am	office	8:30 - 5:00pm		9:00 - 3:30pm
	11:30 - 12:30pm	lunch	or		
	12:30 - 5:00pm	class	9:00 - 5:30pm	office	3:45 - 5:15pm
FRIDAY	8:30 - 11:30am	office	8:30 -5:00pm		Orangeburg-Calhoun Technical
	11:30 - 12:30pm	lunch	or		or
	12:30 - 5:00pm	class	9:00 - 5:30pm	office	United Technologies

VISIONS

INSTRUCTORS' CLASS HOURS DAILY
CYCLE II

	TRMC Office 533-2852 Class 533-2558	HOLNAM Office 496-5027 ext. 280 Class ext. 241	UT Office 536-6964
MONDAY	8:30 - 10:30am/Security Writing 3:30 - 5:00pm/ Environmental Services--Numbers/Charts	12:45 - 2:45pm 3:15 - 5:15pm	Word Power/Prob. Sol. 3:45 - 5:15pm
TUESDAY	8:30 - 10:30pm/Security Writng 2:00 - 3:30pm Pre-Supervisory Writing	NONE	Word Power/Prob. Sol. 3:45 - 5:15pm
WEDNESDAY	3:30 - 5:00pm/ Environmental Services--Numbers/Charts	12:45 - 2:45pm 2:45 - 5:15pm	Word Power/Prob. Sol. 3:45 - 5:15pm
THURSDAY	2:00 - 3:30pm Pre-Supervisory Writing	NONE	Word Power/Prob. Sol. 3:45 - 5:15pm
FRIDAY	NONE	NONE	NONE

TRMC	Holnam	UT
Security Writing March 14-May 3, 1994 Pre-Supervisory Writing--January 11-March 31, 1994 Environmental Services--January 10--April 12, 1994	January 10--April 12, 1994	March 8--April 12, 1994

VISIONS

INSTRUCTORS' CLASS HOURS DAILY
CYCLE III

-	TRMC Office 533-2852 Class 533-2558	HOLNAM Office 496-5027 ext. 280 Class ext. 241	UT Office 536-6964
MONDAY	8:30 - 10:30am/Security Writing 3:30 - 5:00pm/ Environmental Services--Basic Reading	12:45 - 2:45pm 3:15 - 5:15pm	Blueprint Reading 1:45 - 3:15pm 3:45 - 5:15pm
TUESDAY	NONE	NONE	Blueprint Reading 1:45 - 3:15pm 3:45 - 5:15pm
WEDNESDAY	3:30 - 5:00pm/ Environmental Services--Basic Reading	12:45 - 2:45pm 3:15 - 5:15pm	Blueprint Reading 1:45 - 3:15pm 3:45 - 5:15pm
THURSDAY	NONE	NONE	Blueprint Reading 1:45 - 3:15pm 3:45 - 5:15pm
FRIDAY	NONE	NONE	NONE

TRMC	Holnam	UT
Security Writing--March 14-May 16, 1994 Environmental Services--April 25--June 27, 1994	June 1-August 14, 1994	May 2--July 29, 1994

VISIONS

INSTRUCTORS' CLASS HOURS DAILY
CYCLE IV

	TRMC Office 533-2852 Class 533-2558	HOLNAM Office 496-5027 ext. 280 Class ext. 241	UT Office 536-6964
MONDAY	3:30-5:30pm/Reading Strategies	12:45 - 2:45pm Cement 3:15 - 5:15pm Cement	10:00 - 11:00am SPC 1:00 - 2:00pm SPC 3:30 - 4:30pm SPC 5:00 - 6:00pm SPC
TUESDAY		12:45 - 2:45pm Chemistry 3:15 - 5:15pm Chemistry	10:00 - 11:00am SPC 1:00 - 2:00pm SPC 3:30 - 4:30pm SPC 5:00 - 6:00pm SPC
WEDNESDAY	3:30-5:00pm/Numbers/Charts	12:45 - 2:45pm Cement 3:15 - 5:15pm Cement	10:00 - 11:00am SPC 1:00 - 2:00pm SPC 3:30 - 4:30pm SPC 5:00 - 6:00pm SPC
THURSDAY		12:45 - 2:45pm Chemistry 3:15 - 5:15pm Chemistry	10:00 - 11:00am SPC 1:00 - 2:00pm SPC 3:30 - 4:30pm SPC 5:00 - 6:00pm SPC
FRIDAY	NONE	NONE	10:00 - 11:00am SPC 1:00 - 2:00pm SPC 3:30 - 4:30pm SPC 5:00 - 6:00pm SPC

TRMC	Holnam	UT
		SPC--Oct. 3--Oct. 21, 1994 Session I
Environmental Services--August 22-November 18, 1994	Cement--September 12-November18,1994	SPC--Oct. 24--Nov. 11, 1994 Session II
Numbers and Charts--August 22-November 18, 1994	Chemistry--October 4-November 24, 1994	SPC--Nov. 14--Dec. 2, 1994 Session III

Summative Results
of Supervisor Pre/Post Comparison of Employee

Percent of Employees Evaluated who Increased from Pre to Post

	Job Attitude	Productivity	Quality of Work	Attendance	Job Knowledge
Holnam	23/42 54%	18/42 42%	18/42 42%	19/42 45%	28/42 66%
United Technologies	12/18 60%	10/18 55%	9/18 50%	2/18 11%	9/18 50%
TRMC	2/22 9%	6/22 27%	5/22 22%	4/22 18%	3/22 13%

Raw score and percent of students who increased between pre and post evaluation.

Comments from Supervisors

"My officers have improved significantly in both writing and oral communication."
"fewer leave forms submitted each month"
"more cooperative"
"seldom tardy"
"less supervision is needed"

Raymond Mack
Security Head, TRMC

"There has been definite decrease in overtime plantwide. A lot more interest in computers which will lead to more production in 1995. Before workers were almost frightened at the thought of a computer. Down the road, hourly workers are going to have to become more dependent on computer usage. We went from .39 man hours per ton to .33 man hours per ton."

Robbie Mims
Production Manager, Holnam

"There was less kiln downtime which means people are doing their jobs better. During monthly meetings I've noticed that employees are understanding the terminology better. It is a fact that 1994 was the best year this plant has had in the last 10 years. Some part of this has to be attributed to the efforts being made to lift the educational levels of plant employees."

Tom Ertel
Process Engineer, Holnam

"Workers were sent to do one job and something next to it needed work. Before classes, they ignored the other job. Now they ask about and fix it."

Johnny Smalls
Utility Supervisor, Holnam

"More employees come and get forms and fill them out themselves."

Sandra Griffin
Personnel Assistant Benefits Coordinator, Holnam

"Noticed a better understanding of cement as a product."

Kenny Murray
Production Supervisor, Holnam

"Employees can now help keep the SPC charts up to date. Need 100% participation in classes given to be helpful in all operations."

Ulysses Hacket
Supervisor, United Technologies

"Only if it will help do job better or if required" **(Keith Batiste, Ford Keyless Supervisor, United Technologies)** "Yes, if the course is needed to fulfill their job skills."**(Dora Tindal, Department Head Patient Account Services, TRMC)** in answer to "Based on the effect the program has had on your employees would you recommend additional employees to the program?"

"Less corrections are needed regarding grammar and punctuations."

Beth Summers
Department Head, Admitting

Comments from Students

"Why did you attend classes?"

"To increase my knowledge."

"Has your work life improved?"

"Yes, attending class helps me to understand better." **United Technologies**
"I have learned a little more about the components I work with. In turn, this has been a vehicle for me to do more efficient work."
"I am still doing the same things with no raise." **United Technologies**
"I understand what I'm doing better now." **United Technologies**
"I read, write and understand better," **The Regional Medical Center**
"I feel more efficient. My evaluations are better and I set aside time for proofing." **The Regional Medical Center**
"I feel good about myself. I know my job performance is better. I've learned how to reason logically and do more things on my own." **The Regional Medical Center**
"Everything seems simpler now that I understand my work a little better. I know my job but now I can make decisions quicker. I follow directions in a 1, 2, 3, order now. Before I guessed at it." **The Regional Medical Center**
Going to classes was the best thing that ever happened to me. I love work especially when I know how to do everything." **The Regional Medical Center**
"Project VISIONS changed my life. I can do anything I try to do now. Nobody has to help me figure out the steps for mixing products or following directions. Practice in class made a difference." **The Regional Medical Center**
"I am more independent at home and at work." **The Regional Medical Center**
"I complain less because I understand my job skills better. My employment and personal habits are much improved." **The Regional Medical Center**
"I work faster because I understand instructions better." **The Regional Medical Center**
"I feel good about participating. I got a promotion." **The Regional Medical Center**
"My work life has improved because I have more pride in my work. The classes

make you feel like you can do more." **Holnam**

"At this time I'm not required to do or use what I'm learning on the job. But I know I will in the future." **United Technologies**
"I have learned more about the components I work with. In turn, this has made me more efficient." **United Technologies**
"I can speak with more self-confidence." **United Technologies**

#95-014

SUPERVISORS' EVALUATION OF PROGRAM EFFECTS ON THEIR DEPARTMENTS SUMMARY

In your opinion, now that the initial course has been completed, how would you rate its effects on participants that you supervise? Circle the number that shows how you feel.

PRODUCTION:

2	9%	14	64%	4	23%	0	0%	0	0%
Greatly increased		Somewhat increased		Stayed the same		Somewhat decreased		Greatly decreased	

QUALITY:

3	14%	12	55%	6	27%	0	0%	0	0%
Greatly improved		Somewhat improved		Stayed the same		A few more errors		Many more errors	

TRANSFERABILITY:

After completing the program, when new technical equipment or training comes to your department, do you think your employees will be able to handle it

14	64%	**Better**	6	27%	**The same**	0	0%	**Worse**

ATTITUDE:

Regarding the employees in your department who participated in the program, how much improvement in attitudes towards themselves, their jobs, or the company did you observe? (for example: greater cooperation, team-building, etc.

4	18%	17	77%	1	5%	0	0%	0	0%
A lot		Some		Same amount as before program		Little		None	

Since your employees participated in the program, do you feel that your job as a supervisor has become:

1	5%	12	55%	7	32%	1	5%	0	0%
Much easier		Somewhat easier		Same as before		Somewhat more difficult		Much more difficult	

Please give an example:

1. Writing attitude and attendance all improved greatly.
2. Less time of explanation.
3. Less explaining is needed.
4. Less connections are needed regarding grammar an punctuation in evaluations, etc.
5. Need 100% participation in classes given to be helpful in all operations.
6. Help keep chart up to date.
7. Thought should always precede action. Which is not the case here. Any courses to

improve concentration!

8. They are making some decisions on their own now, which makes my job a little easier.
9. The ones attending the classes seem to have a little more initiative and a little more self-starting.
10. Follows instruction better because they understand better.
11. Employees more aware of how important chemistry and procedures relate to quality tests.

*If your company plans to continue to have employees participate in similar programs in the future, what would you recommend to improve the way the program is run?

1. I'm presently asking administrators to beg this staff to stay.
2. Longer classes (9 months).
3. To separate those who have some basic knowledge from those who are being exposed for first time.
4. No.
5. I don't know enough about the program.
6. Deal with in-house facility limitations.
7. Would recommend a variety of courses to be offered.
8. Better communication between managers and employees.
9. None.
10. More basic math.
11. Hold class away from work.
12. Anything that might improve interest in program, we must instill the desire to better oneself.
13. None.
14. Possibly more hands on type of instruction.

*Based on the effect that the program has had on the employees from your department who participated, would you recommend additional employees to the program? Why or why not?

1. Yes.
2. Yes.
3. Yes, if the course is needed to fulfill their job skills.
4. Yes. Many need to improve writing skills.
5. Yes - as staffing permits. Staff wants to participate in training and education and when it directly relate to their job I feel that should be encouraged.
6. Yes. Self-confidence improve.
7. Yes.
8. Yes. Some employees need a broader technical base.
9. Only if it will help do job better or if required.
10. Yes.
11. Yes. Education and dedicated effort leads to success.
12. Yes. To give all operators a chance to final test.
13. Yes.
14. Yes.
15. Yes. Any training should be beneficial.
16. Yes. Because everyone needs more education
17. No. These 10 were the only ones in need of the basics offered.

18. Yes. Every person should try to improve.
19. Yes. They can understand material better.
20. Yes. More knowledgeable employee = better employee.

*Of the employees in your department who participated in the program, have any shown progress in potential for advancement?

1. Yes.
2. Employee was just move to new position prior to class.
3. Not certain.
4. Not sure.
5. 2
6. Yes.
7. Some what.
8. The 3 employees that participated in the program are excellent employees and feel they will excel in whatever they engage in as it relates to their future.
9. Yes.
10. No.
11. Yes
12. Yes.
13. We're getting there - one already promoted.
14. Some, but not much.
15. Yes.
16 No.
17. Not just yet.
18. Not just from the class itself.

1/13/95

Class Participation Survey

Company: The Regional Medical Center Surveyed: 18

	Very Imp.		Mildly Imp.		Not Imp.	
Knowledge Goals:						
To become better informed	15	83%	2	11%	0	0%
To satisfy curiosity	11	61%	5	27%	0	0%
Personal Goals:						
To get another job	14	77%	3	17%	1	6%
To advance in my present job	14	77%	4	22%	0	0%
To get a certificate	10	56%	6	33%	1	6%
Transitions:						
Because of changes in my job	7	39%	8	44%	1	6%
Community Goals:						
To understand community problems	4	22%	12	67%	1	6%
To become a better citizen	3	17%	13	72%	1	6%
To work for solutions to problems	11	61%	6	33%	1	6%
Social Goals:						
To meet new people	6	33%	10	56%	1	0%
To feel a sense of belonging	6	33%	9	50%	2	11%
Escape Goals:						
To get away from routine	6	33%	8	44%	5	28%
To get away from personal standards	9	50%	5	28%	3	17%

Obligation Fulfillment:

To meet educational standards	14	77%	5	28%	0	0%
To satisfy employer	10	55%	7	39%	1	6%

Personal Fulfillment:

To be a better parent or spouse	15	83%	3	17%	0	0%
To help my child with homework	16	88%	1	6%	0	0%
To become a happier person	13	72%	3	17%	1	6%

Cultural Knowledge:

To study my own culture	8	44%	6	33%	3	17%

Other Reasons: (please list any other reasons why you attended these classes)

1. I am going back to school. These classes helped my study habits to improve. Now I'm back in the study mode. I had been out of school a long time. Ms. Elizabeth made me like not love yet.
2. The time off with pay was very good. I like the calculator but now they want to take the calculator back. I think you shouldn't.
3. to better myself. Most times the classes were good, sometime we had to come for tutoring by ourselves. I like this better. I understand better when it is explained to me by myself. the teacher always wanted you to spell right. My book said you don't have to worry about your spelling. Somebody ought to tell Elizabeth. She love to make you write it again if it was spell wrong.
4. It was recommended.

Why do you think other employee are not interested in classes?

1. Some have second jobs. They don't have the time. Others say they don't like to do homework or study. Some have problems getting home if their ride leaves them.
2. Classes are hard sometimes. People don't want others to know what they don't know.
3. They don't like spelling either.
4. They don't need help doing a house work job so they won't waste time cause nobody thought they was doing bad work. I just hope they don't think I was doing bad work cause I read and follow directions to the "t". my supervisor said I'm in class because with new skills she believes I can be a supervisor. I'm going take every job that calls me.
5. Supervisors often won't want so many people out of the office. Maybe if classes could be offered after 5 or before 8.
6. They think maybe their jobs will be affected if others find out simple things they may have forgotten. Production is also slow during class time. Many may not reach the quote that they should.

7. Morale is often low around here so they don't see any significance for class. It just seems like some more work to do.
8. They were not informed or did not see announcements about the classes. Many had little time then but are anxious to take or make the time since I told about my experiences in classes.

from: Table 6 Cross, p. 89 (Carp, Peterson, and Roelfs, 1974, p.42)

Results of the Class Participation Survey

This survey is to help identify the reasons that you participated in classes. Please take a few minutes to respond to each of the statements below. Put a check ( ) in the column under the statement which best describes how you feel about the statement.

	Very Imp.	Mildly Imp.	Not Imp.	No Response
Knowledge Goals:				
To become better informed	33 76.7%	9 20.9%	0	1 2.3%
To satisfy curiosity	11 25.6%	18 41.9%	4 9.3%	10 23.2%
Personal Goals:				
To get another job	12 27.9%	8 18.6%	11 25.6%	12 27.9%
To advance in my present job	30 69.8%	4 9.3%	7 16.3%	2 4.6%
To get a certificate	12 27.9%	9 20.9%	10 23.3%	12 27.9%
Transitions:				
Because of changes in my job	26 60.5%	7 16.3%	8 18.6%	2 4.6%
Community Goals:				
To understand community problems	12 27.9%	18 41.9%	6 13.9%	7 16.3%
To become a better citizen	20 46.5%	11 25.6%	5 11.6%	7 16.3%
To work for solutions to problems	25 58.1%	9 20.9%	3 6.9%	6 13.9%
Religious Goals:				
To serve my church	9 20.9%	12 27.9%	12 27.9%	10 23.3%
To further spiritual well-being	12 27.9%	14 32.5%	13 30.2%	4 9.3%
Social Goals:				
To meet new people	14 32.5%	13 30.2%	9 20.9%	7 16.3%
To feel a sense of belonging	15 34.8%	12 27.9%	11 25.6%	5 11.6%
Escape Goals:				
To get away from routine	12 27.9%	9 20.9%	16 37.2%	6 13.9%
To get away from personal problems	5 11.6%	8 18.6%	21 48.8%	9 20.9%

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	Very Imp.	Mildly Imp.	Not Imp.	No Response
Obligation Fulfillment:				
To meet educational standards	**27** 62.8%	**11** 25.6%	**2** 4.7%	**3** 6.9%
To satisfy employer	**18** 41.9%	**15** 34.9%	**3** 6.9%	**7** 16.3%
Personal Fulfillment:				
To be a better parent or spouse	**21** 48.8%	**9** 20.9%	**6** 13.9%	**7** 16.3%
To help my child with homework	**20** 46.5%	**8** 18.6%	**6** 13.9%	**9** 20.9%
To become a happier person	**19** 44.2%	**6** 13.9%	**8** 18.6%	**10** 23.2%
Cultural Knowledge:				
To study my own culture	**14** 32.5%	**9** 20.9%	**12** 27.9%	**8** 18.6%

Other Reasons: (please list any other reasons why you attended these classes)
See comments on next page.

Why do you think other employees are not interested in classes?
See comments on following pages.

from: Table 6 Cross, p. 89 (Carp, Peterson, and Roelfs, 1974, p. 42)

COMMENTS from respondents:

The following statements are directly quoted from the handwritten responses given by participants on the survey. Editorial changes are noted in brackets [] and spelling has been corrected.

OTHER REASONS:

A. To share my knowledge of chemistry with fellow coworkers-workers.
B. Because my job required me to attend.
C. To increase my knowledge of [the] cement process and to help understand some of the reasons things happen.
D. To upgrade my general knowledge aside from the courses I'm taking at the moment at the tech. school.
I. To get my GED [and] to keep up with the times.
K. [for] more education
L. I want[ed] to attend, but I was also required to attend.
M. To understand chemistry enough to pass a state test for Bio. waste water.
N. I came to learn chemistry.
O. To see how many people are having fun and to learn about the metric system.
P. Required
Q. Strongly advised by upper management.
R. Because the more I know the longer I can maintain my job and to stay in the grove with the moving world.
S. To better my knowledge in chemistry.
T. I was told I had to come to these classes.
U. Because I was told I had to.
V. I attended class to get a better understanding of the cement industry where I work.
W. To get a better education.
X. Supervisor told us to come, not my decision.
Y. To satisfy my own personal curiosity and perhaps use this knowledge someday.
Z. To fulfill my job opportunities and further my understanding of the chemical changes in my job related elements.
AA. Learn more in life and to understand.
BB. To get more knowledge about the chemistry of cement and other materials around Holnam.
CC. To learn more about what goes on in the lab and with the kiln mixtures. That some day [it] will [help] to get me a burner [operator] job.

WHY DO YOU THINK OTHER EMPLOYEES ARE NOT INTERESTED IN CLASSES ?

A. Time constraints, family matters, personal reasons, simply not interested.
B. Does [not] feel it is important to their jobs.
C. They resist any change from the old time way.
D. They think they're too old for it or satisfied with the job they have at the moment.
E. Many are long time employees who are quite comfortable with their job and their abilities to do them. Also this particular course (Chemistry) is probably not applicable to them.
F. To many other things to do.
G. Afraid of the word chemistry
H. They have a us (employee) and them (employer) attitude, and don't want to participate in anything the company endorses.
I. Lazy minded, a feeling that they have survived this long and [are] getting by. Some feel "I can't" learn anything else, some say I know enough.
J. They do not need it.
L. Some are made to attend, others are not. Some want to attend.
M. 1. Lazy. 2. Did not want to spend the time. 3. Could not understand how/why this would help them. 4. Did not pay enough.
O. Because they do not have the time. Some want to go home and see their lady.
P. Most employees can't see any relation to their present job or duties.
Q. They feel that they may not be smart enough to handle the topic.
R. Because they feel that they have everything they need to make it in the world or on this job.
S. Because they think it is not important
T. They didn't want to and were not interested.
U. Too many technical terms of the elements
V. Some say just not interested, not enough pay to come to class, don't want to stay over or come in [early] to attend classes.
W. Scared off by thought of tests, etc. This was an initial scare to me. Since gradually working into tests over the years of classes provided, I feel more secure about them. They actually may be a great thing if we could earn credit by them.
X. All employees are not having to attend.
Y. Some employees think it doesn't apply to their immediate job and consider it useless.
Z. I don't know.
AA. Money and learning.
BB. They might not be interested in the makeup of materials around this plant and at home.
CC. (Time.) Ready to go home after work. Don't want to come in early, doing things around the house.
DD. Kids at home and have wife working.

Class Participation Survey

Company: United Technologies Surveyed: 7

	Very Imp.		Mildly Imp.		Not Imp.	
Knowledge Goals:						
To become better informed	6	86%	1	17%	0	0%
To satisfy curiosity	1	17%	2	29%	0	0%
Personal Goals:						
To get another job	1	17%	2	29%	0	0%
To advance in my present job	6	86%	0	0%	0	0%
To get a certificate	1	17%	1	17%	1	17%
Transitions:						
Because of changes in my job	3	43%	2	29%	0	0%
Community Goals:						
To understand community problems	4	57%	1	17%	1	17%
To become a better citizen	4	57%	1	17%	1	17%
To work for solutions to problems	3	43%	0	0%	1	17%
Social Goals:						
To meet new people	5	71%	1	17%	0	0%
To feel a sense of belonging	2	29%	1	17%	0	0%
Escape Goals:						
To get away from routine	2	29%	1	17%	1	17%
To get away from personal standards	2	29%	0	0%	2	29%

Obligation Fulfillment:

To meet educational standards	5	71%	0	0%	0	0%
To satisy employer	4	57%	0	0%	0	0%

Personal Fulfillment:

To be a better parent or spouse	4	57%	0	0%	1	17%
To help my child with homework	3	43%	0	0%	1	17%
To become a happier person	4	57%	0	0%	0	0%

Cultural Knowledge:

To study my own culture	4	57%	0	0%	0	0%

Other Reasons: (please list any other reasons why you attended these classes)

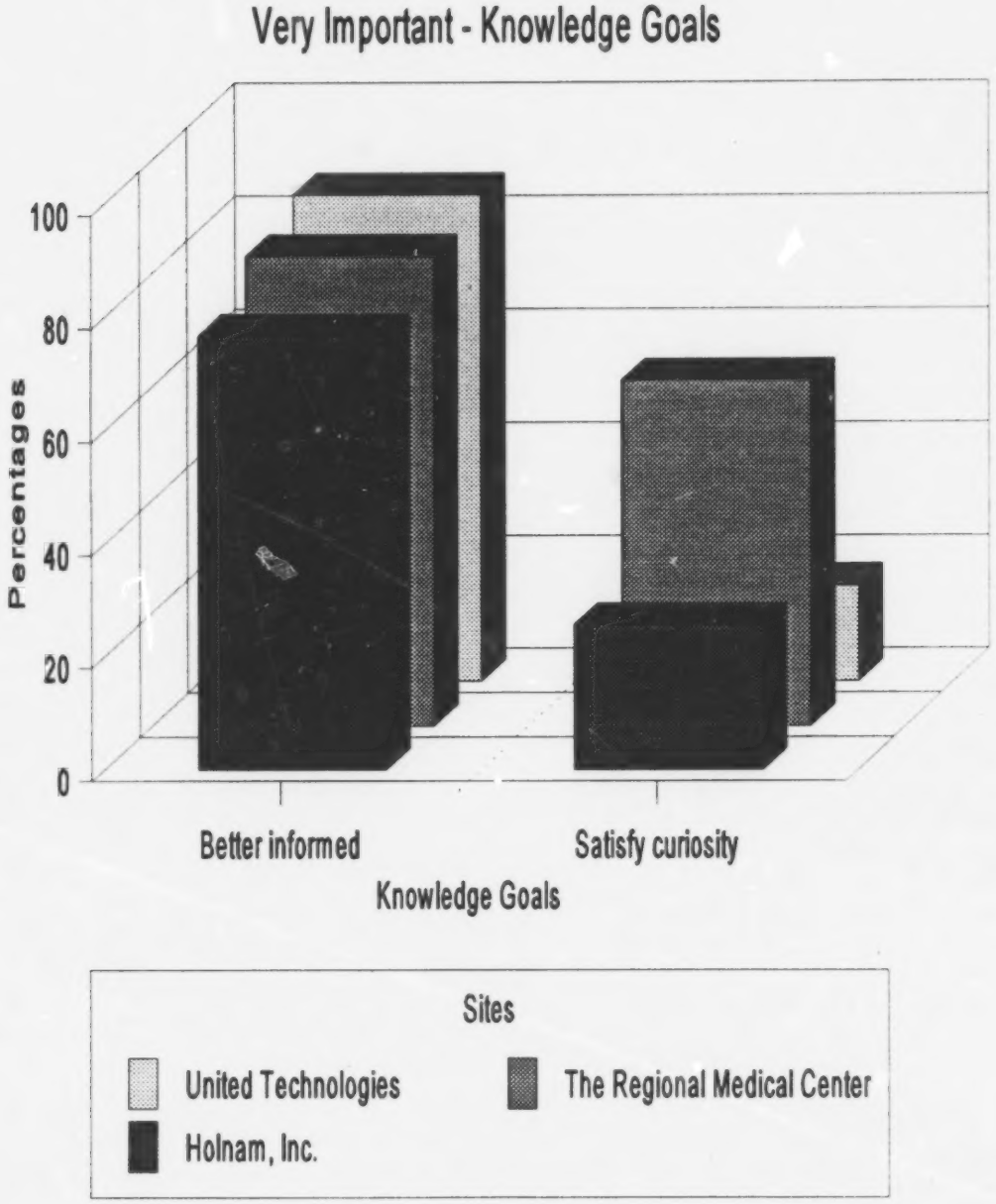
1. To get a better understanding of making charts and to understand their meanings and uses.
2. To do my job better.
3. No other choice.

Why do you think other employee are not interested in classes?

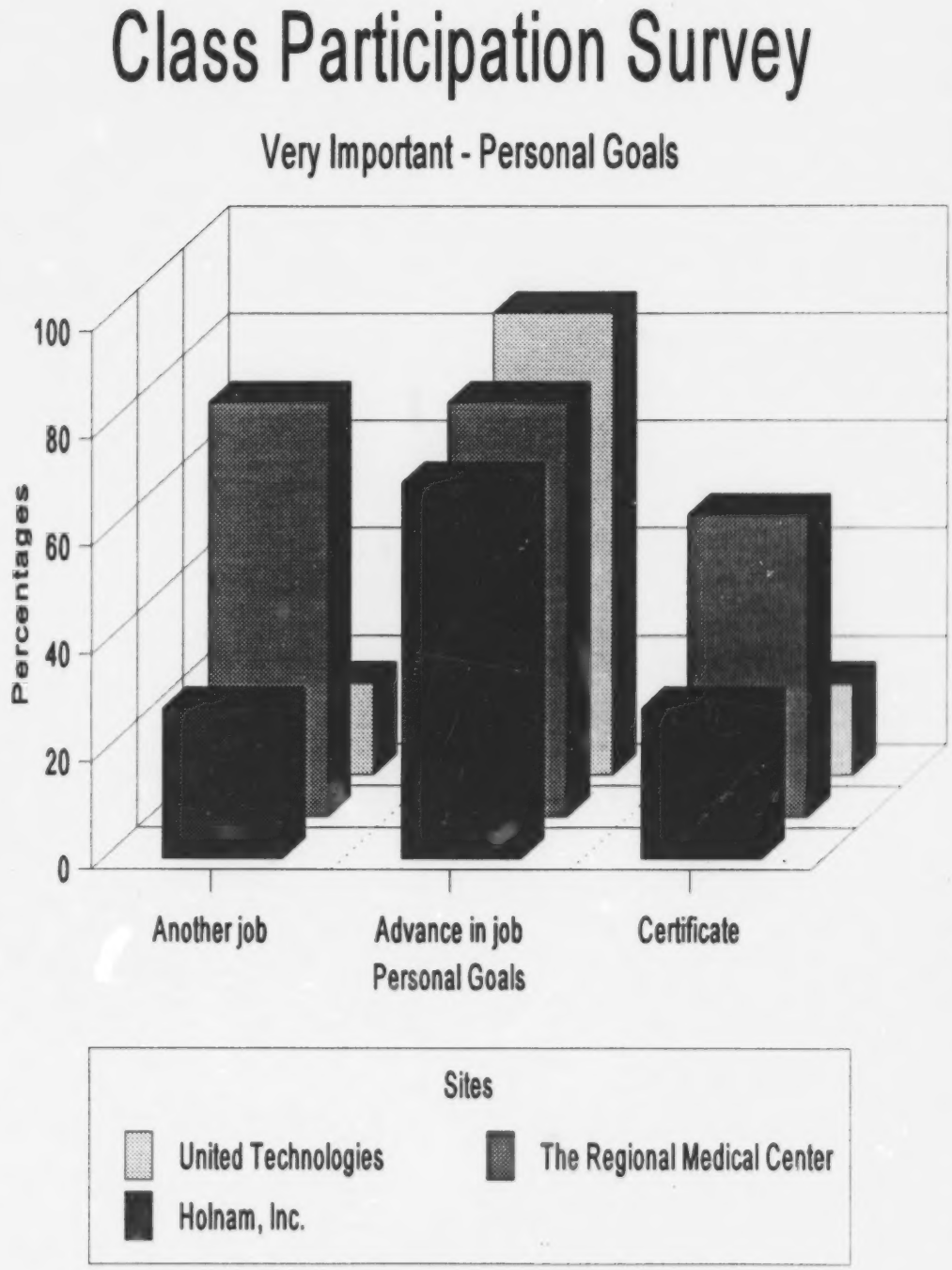
1. Some feel the classes are boring.
2. Because you have to go on your time and take to long to give you your certificate.

from: Table 6 Cross, p. 89 (Carp, Peterson, and Roelfs, 1974, p.42)

Class Participation Survey



Class Participation Survey



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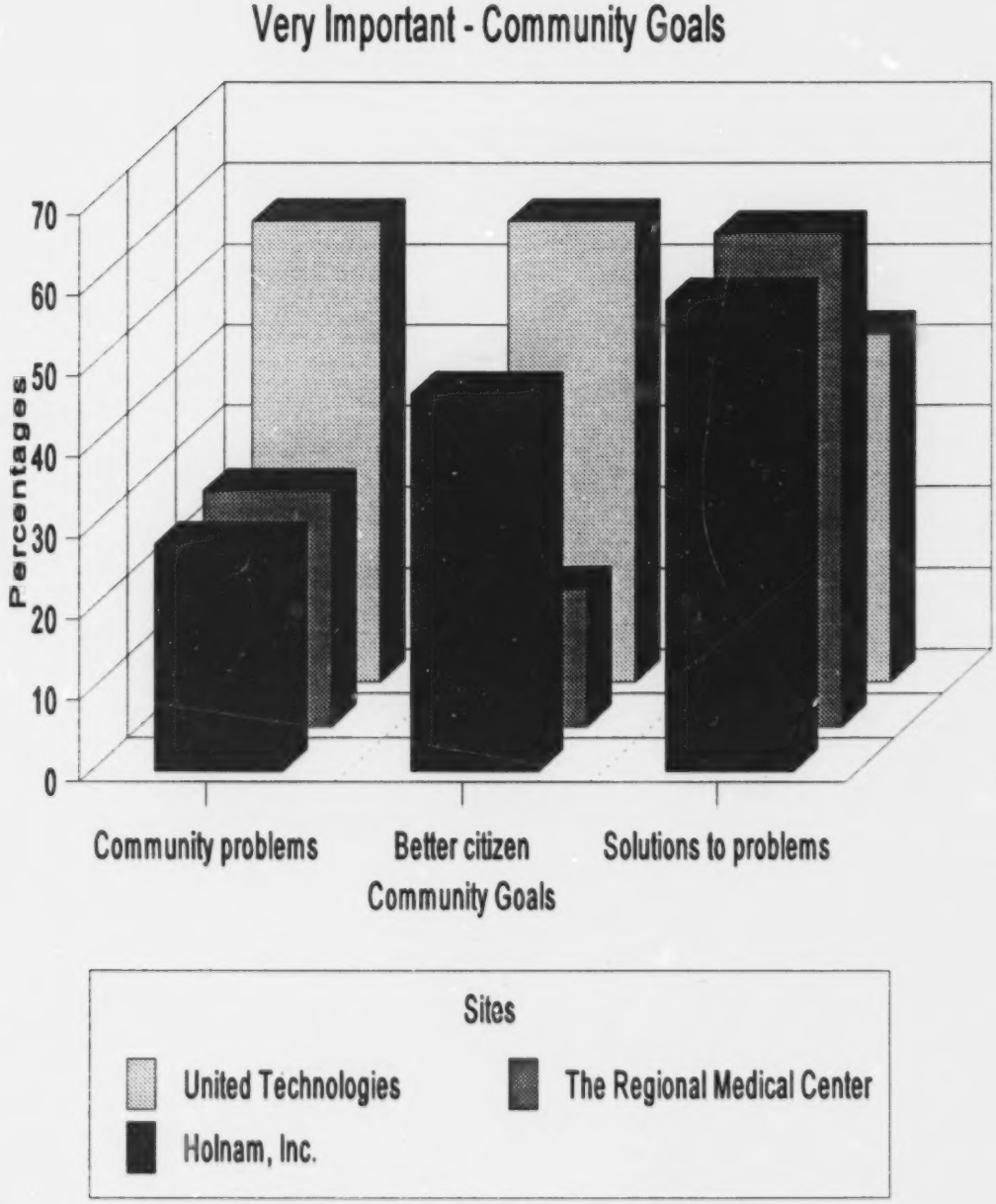

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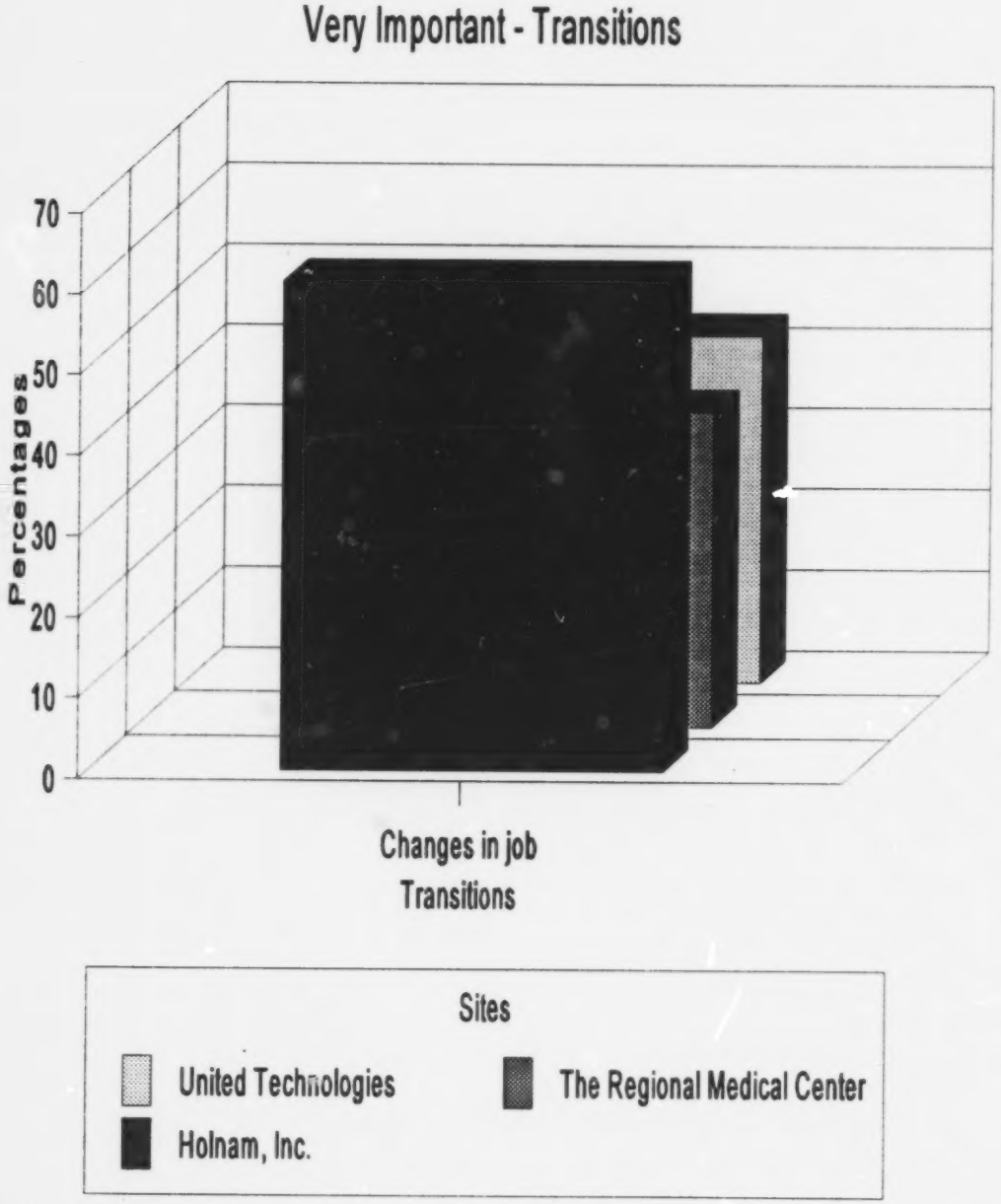

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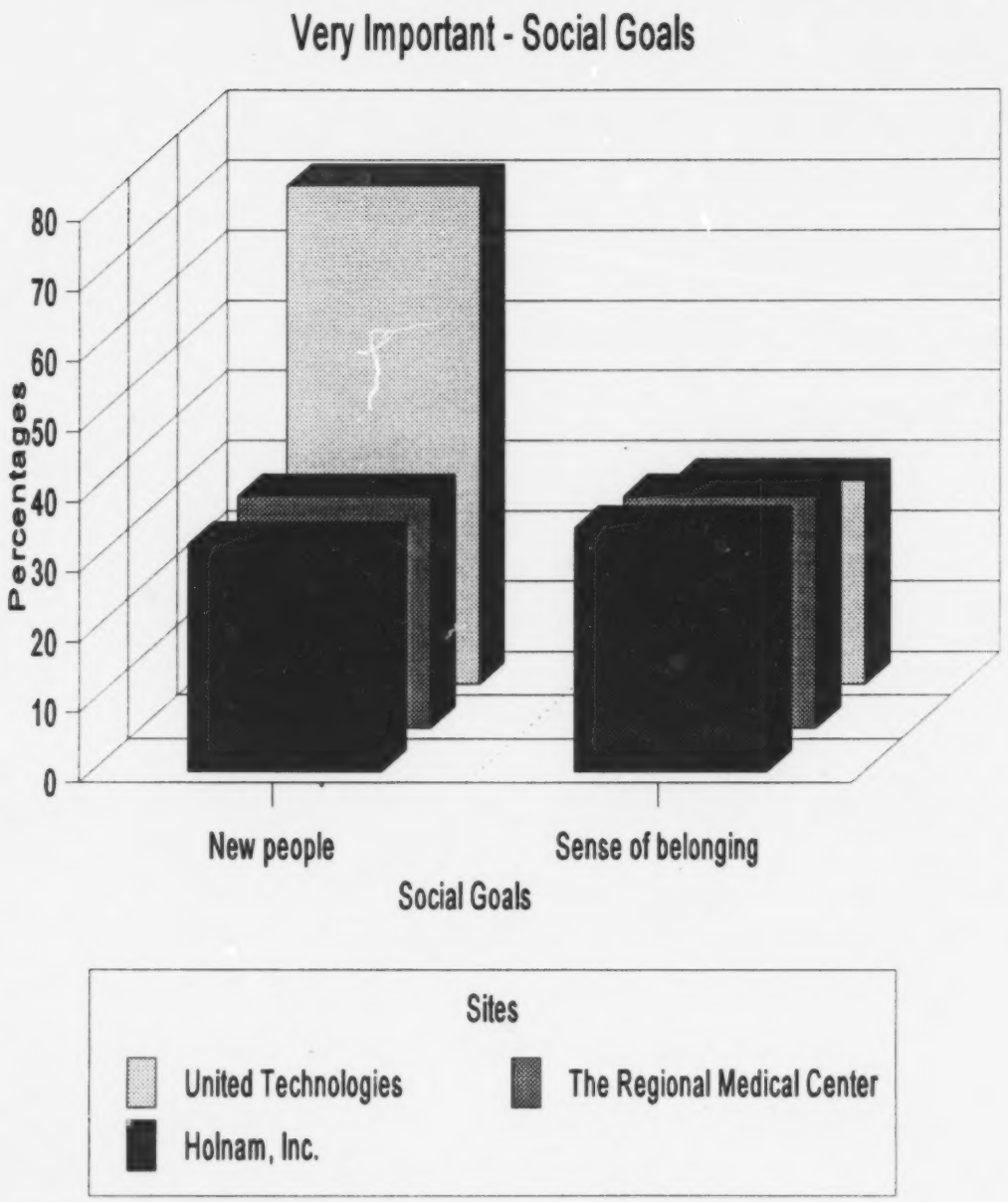

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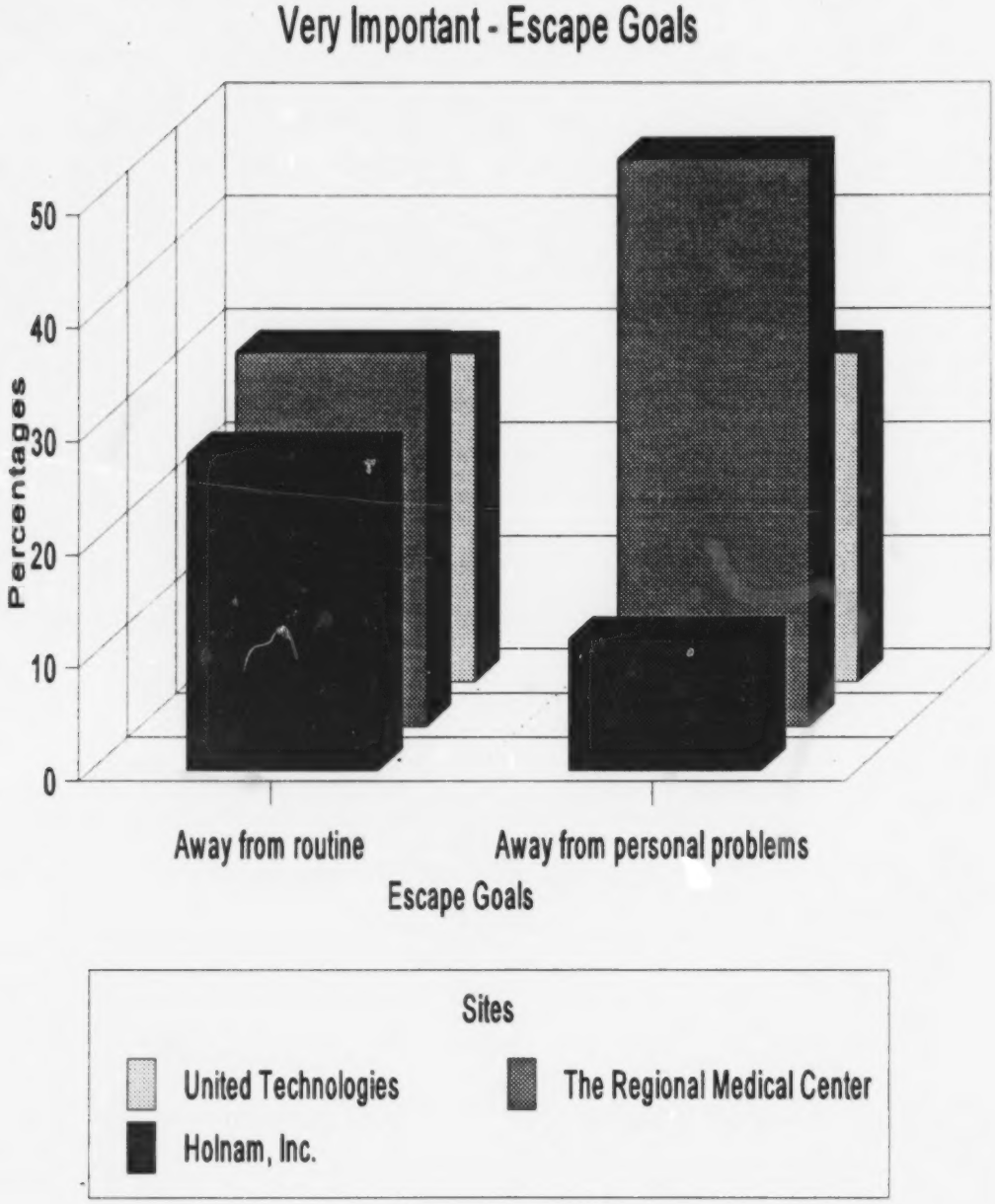

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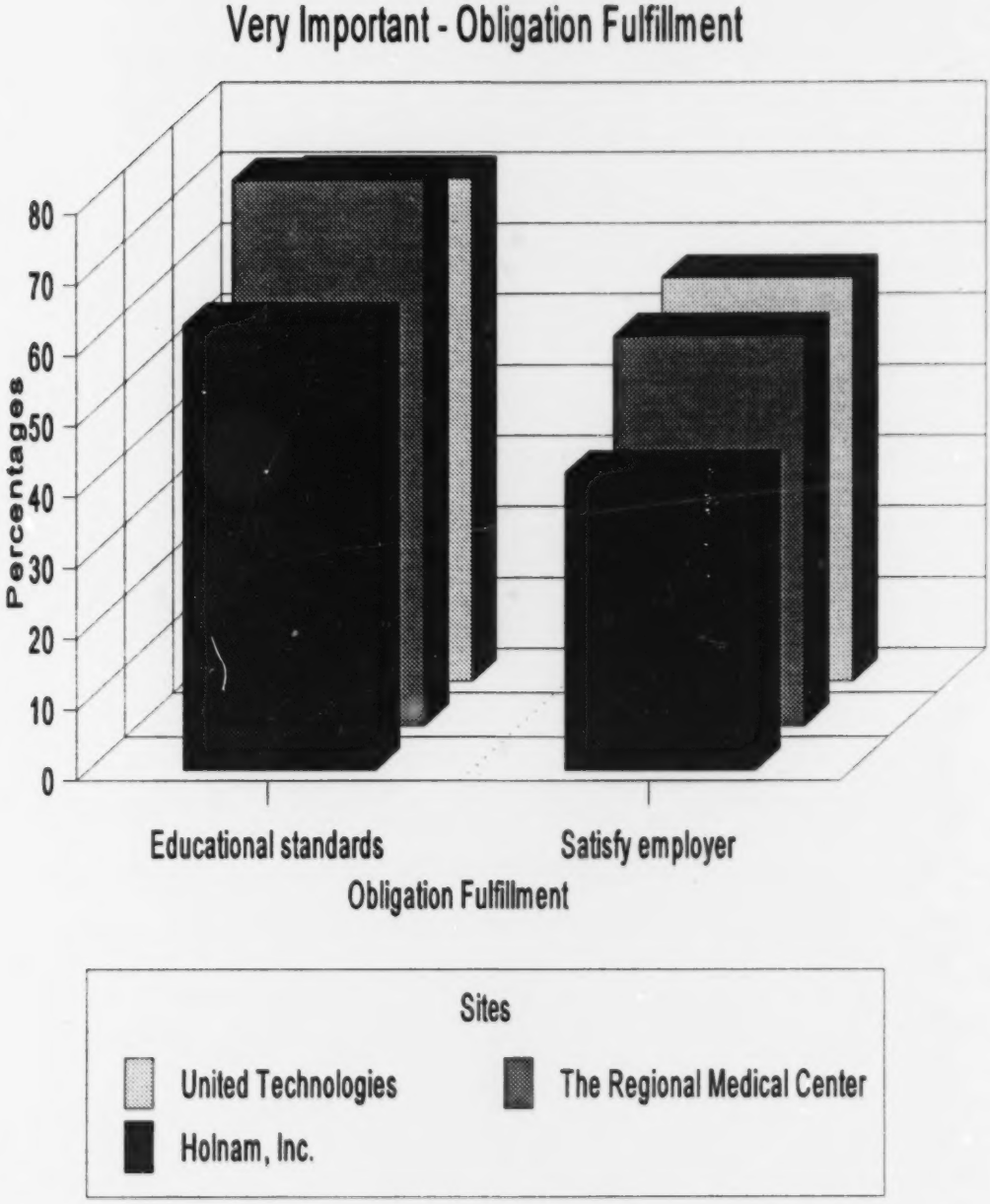

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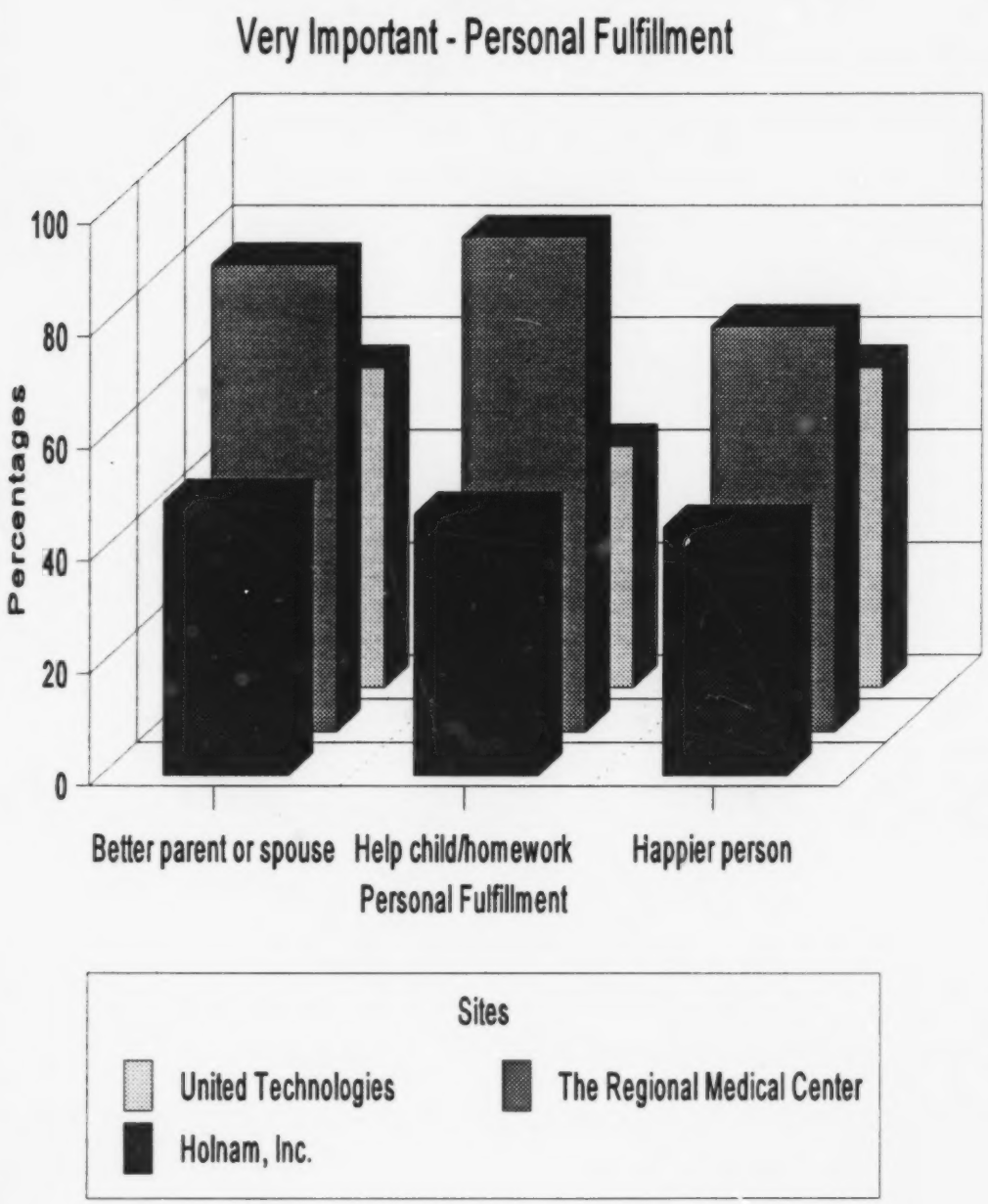

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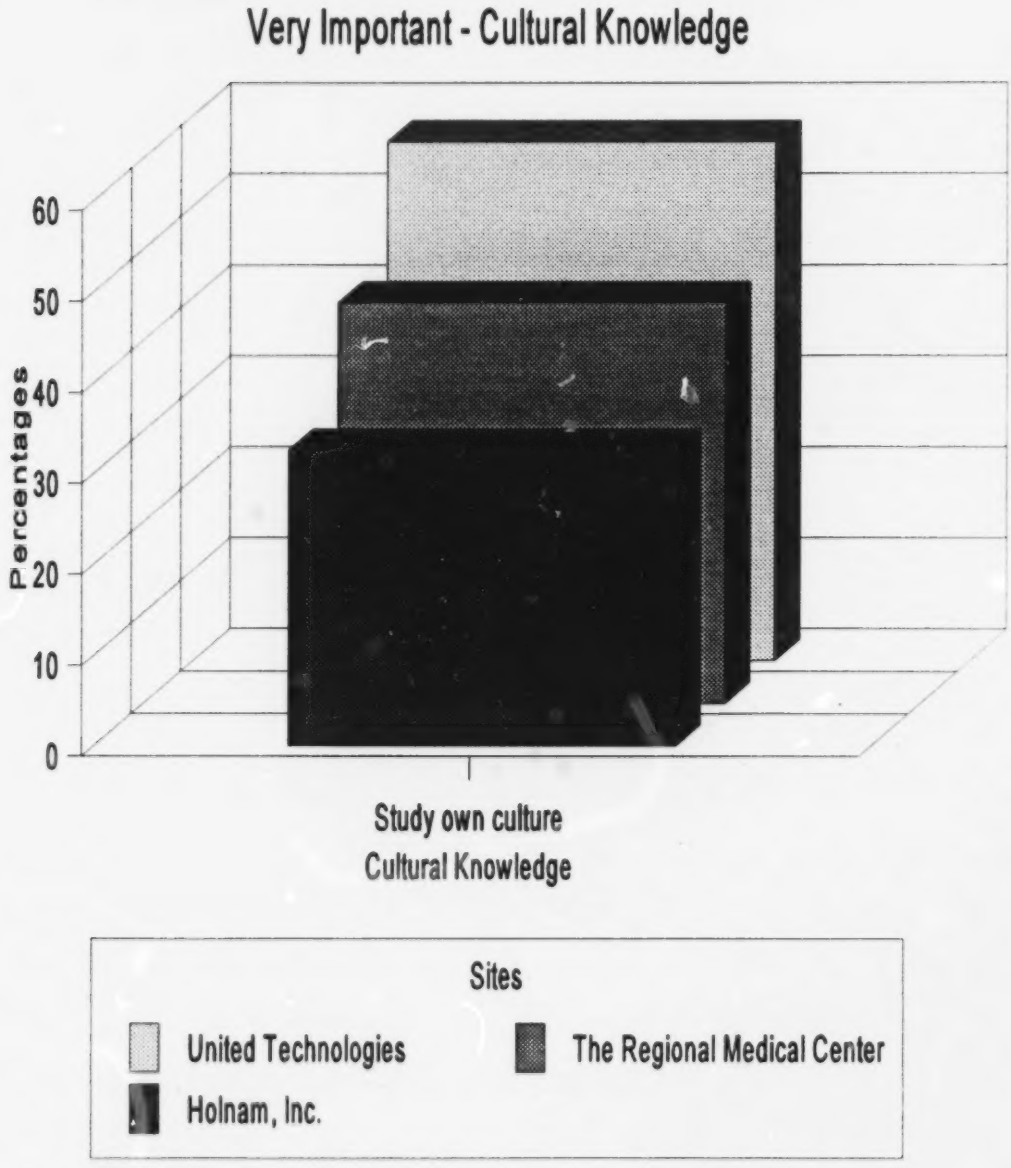

Summary of Private Interviews
(Persisters)
United Technologies

Questions to be asked - Private Interview to students in class (Persisters)

1. Why did you attend classes?

1. To increase my knowledge.
2. The class was offered and I like taking advantage of something that's going to benefit me.
3. I attended classes to gain knowledge of things that I have not been expose to and to refresh myself with things that I may have forgotten.
4. To learn more.
5. To further my education.
6. I attended classes to refresh my memory on problems (math) that I rarely had occasion to use since high school.

2. What do you consider the most important things you have learned?

1. You have to continue using what you know, otherwise you'll somewhat forget it.
2. I learned that you are always able to learn something new or improve on what you know already.
3. Blueprint, sorting, math etc.
4. Blueprint.
5. Applying a better knowledge of decimals, fractions, English and math to my every day life. Blueprint was very interesting also.

3. Was anybody behind your attending classes?

No.
No. I did it because I wanted to.

family? 4 yes

friends? 2 yes

supervisor? 2 yes

4. Has your personal life improved through attending classes? How?

1. Yes.
2. Yes. I still can master some of the same things that I did years ago.
3. I feel that these classes have given me more confidence in my abilities to interact with others in other situations.
4. I'm better in doing a very good job, etc.
5. Yes. I feel better about myself
6. I can speak with more self-confidence than previously.

Has your work life improved through attending classes? How?

1. Yes, attending class helps me to understand better.
2. At this time I'm not required to do or use what I'm learning or learned on the job
3. I'm doing now. But I know I will in the future. I do have to make sure my hours are calculated correctly on my check.
4. I have learned a little more about the components I work with. In turn this has been a vehicle for me to do more efficient work.
5. I can do a great and I understand what I'm doing better now.
6. I have more knowledge about my job.
7. I am still doing the same things with no raise etc.

5. How would you encourage others who did not take advantage of classes to attend classes?

1. To encourage them to do so.
2. With all my heart I encourage them to do so. Because what they've learned they can have a chance to know if they still can do it and if not, here's a chance to learn.
3. I would encourage them to attend classes by letting them know that I have gain a lot of knowledge by being in the classes and that sometimes you really need to update yourself in all areas of learning.
4. Tell them to go, they will get something out of it.
5. By telling them how interesting the lesson was and how the instructor presented it.
6. I would tell them that no matter how much one thinks. He knows there is always room for improvement. With the cost of education rising and we don't have to pay anything but attention and learn.

Summary of Private Interviews
(Persisters)
The Regional Medical Center

Questions to be asked - Private Interview to students in class (Persisters)

1. Why did you attend classes?

1. To refresh my knowledge.
2. To learn more and upgrade my job.
3. I felt I needed assistance in math.
4. To improve my mathematical skills.
5. I felt I needed a refresher in math.
6. Because I wanted to improve myself.

2. What do you consider the most important things you have learned?

1. How to write letters more correct.
2. Fact about the GED.
3. Decimals, percent and conflict resolutions.
4. Fractions, percents and believing in myself.
5. All of what I learned was important.
6. Everything I learned was important.

3. Was anybody behind your attending classes?

family? 3 yes

friends? 2 yes

supervisor? 5 yes

4. Has your personal life improved through attending classes? How?

1. Yes, better writing.
2. Yes, job promotion.
3. No, still the same. I know more than I did before though. I felt credit should have been given through the college because I spent long hours in preparing just like I do for my college classes.
4. Maybe, I feel better about myself even when I don't do as well as I know I can.
5. No.
6. Still the same.

Has your work life improved through attending classes? How?

1. Yes, read and write and understand better.
2. Yes. I feel more efficient, my evaluations are better and I set aside time for proofing and making certain all that I say is right.
3. Yes, example: doing time sheets, schedules and etc.
4. No.
5. No.
6. Still the same.

5. How would you encourage others who did not take advantage of classes to attend classes?

1. I would tell them it helped me.
2. To tell them what I have learned and how it helped me.
3. Tell others about the subjects taught and how refreshed you are when you succeed.
4. Inform them of my progress in ability and attitude.
5. I would tell them how my math skills improved. The refresher was a definite need. I can think of others who need to attend. However, it won't help to encourage them if they aren't interested. I feel that I can tackle any problem in fractions, percents, decimals and others.
6. Advise them to take the class for personal gain.

Questions to be asked Non-attendees (never attended any classes)

1. Did you know about the classes offered through the Technical College concerning basic skill enhancement?

1. No.
2. No.
3. No.
4. Yes.
5. Yes.

2. Why do you think employees chose not to attend?

1. To busy.
2. Because of the high work load.
3. Because they aren't sure what the class will consist of. Some times class makes you insecure. Ms. Ray made us be at ease. It was alright to be wrong as long as you could straighten it out.
4. Work schedule conflict.
5. I thought it would be boring or even embarrassing.

3. Why did you choose not to attend?

1. Long hours of study. I have another job 2 hrs. after this one.
2. I had transportation problems.
3. They could not fit into schedule. I did attend.
4. Supervisor felt the time offered was not convenient at work time.
5. I thought that I knew my job well enough already.

Instructor's Comments:

The survey I copied for you during our staff meeting should be copied and given to all of your students.

Summary of Private Interviews
(Persisters)
Holnam, Inc.

Questions to be asked - Private Interview to students in class (Persisters)

1. Why did you attend classes?

1. Supervisor told me and to learn more about chemistry
2. Refresher and learn new things in life, eager to learn about new things
3. Improve my abilities.

2. What do you consider the most important things you have learned?

1.Chart of elements, Bohr Shell diagram, had not had chemistry before and this helped.
2. So far period chart and understanding its reference in chemistry from high school metric system.
3. Military time, turn on computers and get into Mathkey program.

3. Was anybody behind your attending classes?

family? 2 yes

friends? 2 yes

supervisor? 2 yes

4. Has your personal life improved through attending classes? How?

1. Yes. (got a divorce)
2. In a way the more I or anyone can know and understand the more they can do for their family and improve their own job situation.

Has your work life improved through attending classes? How?

1. Yes, (when he works). Developed a better understanding of chemistry.
2. Yes- more to think forward to and more pride in work, make you feel like you can do more.
3. Yes- to be more observant and learned about computers.

5. How would you encourage others who did not take advantage of classes to attend classes?

1. How would like to earn an extra $40/week and learn things in class that can help you on the job.
2. I told others and encourage them to go, it may help them in their job future.
3. Be supportive and talk about what I learned.

Questions to be asked Non-attendees (never attended <u>any</u> classes)

1. Did you know about the classes offered through the Technical College concerning basic skill enhancement?

1. Yes.
2. Yes.
3. Yes.

2. Why do you think employees chose not to attend?

1. Individual decided inconvience with home responsibilities.
2. Time.
3. Some feel too old or embarrassed.

3. Why did you choose not to attend?

1. Had experience with chemistry analysis - chemistry course at Orangeburg Calhoun Technical College. Work demands.
2. Time and retire in a few years.
3. Need different level math.

Instructor's Comments:

The survey I copied for you during our staff meeting should be copied and given to all of your students.

STUDENT EVALUATION SURVEY SUMMARY

FORMATIVE EVALUATION - SUMMARY
NATIONAL WORKPLACE LITERACY GRANT
FISCAL YEAR July 1, 1993 - June 30, 1994

Student evaluations summarized from:

Cycle I
Pam Vadasz - United Technologies
Lou Taylor - Holnam
April McCollough - Regional Medical Center
Vocabulary Course

Cycle II
Jacqueline Shuler - United Technologies
Lou Taylor - Holnam
Elizabeth Ray - Regional Medical Center
Security Writing, Numbers and Charts, Pre-Supervisory Writing

1. Up to this point, how would you rate this course?

   48% Excellent 38% Good 13% Fair 1% Poor

2. The course is

   52% Very interesting 25% Interesting 15% Sometimes interesting 3% Boring

3. I am encouraged to participate in class

   75% All of the time 20% Sometimes 0% Never

4. The books and materials used in the course are

   5% Very difficult 3% Difficult 64% Just right 25% Easy

5. Do you feel that this course is helping you in your personal life?

   85% Yes 13% No

6. Do you feel that this course is helping you do your job better?

   72% Yes 16% No

7. The instructor is

   60% Very interesting 28% Interesting 9% Sometimes Interesting 1% Boring

8. I understand the material the instructor is teaching

   44% All of the time 50% Most of the time 6% Sometimes 0% Never

STUDENT EVALUATION SURVEY SUMMARY

FORMATIVE EVALUATION - SUMMARY
NATIONAL WORKPLACE LITERACY GRANT

Student evaluations summarized from:
Cycle III

Jacqueline Shuler - United Technologies - Basic Blueprint Reading
Lou Taylor - Holnam - Reading and Math
Elizabeth Ray - Regional Medical Center - Basic Strategies in Reading I, Conflict Resolution Workshop

1. Up to this point, how would you rate this course?

48% Excellent **36% Good** **13% Fair** **1% Poor**

2. The course is

52% Very interesting **30% Interesting** **15% Sometimes interesting** **1% Boring**

3. I am encouraged to participate in class

60% All of the time **39% Sometimes** **0% Never**

4. The books and materials used in the course are

1% Very difficult **12% Difficult** **66% Just right** **13% Easy**

5. Do you feel that this course is helping you in your personal life?

81% Yes **10% No**

6. Do you feel that this course is helping you do your job better?

83% Yes **10% No**

7. The instructor is

49% Very interesting **39% Interesting** **10% Sometimes Interesting** **0% Boring**

8. I understand the material the instructor is teaching

28% All of the time **57% Most of the time** **9% Sometimes** **0% Never**

9. Have the goals and objectives of the course been met?

61% Yes **6% No**

STUDENT EVALUATION SURVEY SUMMARY

FORMATIVE EVALUATION - SUMMARY
NATIONAL WORKPLACE LITERACY GRANT

Student evaluations summarized from:
Cycle IV

Ray Harper - United Technologies	- SPC Simplified - Sessions I, II, III
Lou Taylor - Holnam	- Reading and Math, Basic Chemistry
Elizabeth Ray - Regional Medical Center	- Numbers and Charts, Basic Strategies in Reading II,

1. Up to this point, how would you rate this course?

58% Excellent **35% Good** **6% Fair** **0% Poor**

2. The course is

53% Very interesting **32% Interesting** **5% Sometimes interesting** **1% Boring**

3. I am encouraged to participate in class

79% All of the time **16% Sometimes** **2% Never**

4. The books and materials used in the course are

5% Very difficult **9% Difficult** **69% Just right** **15% Easy**

5. Do you feel that this course is helping you in your personal life?

91% Yes **9% No**

6. Do you feel that this course is helping you do your job better?

91% Yes **6% No**

7. The instructor is

65% Very interesting **26% Interesting** **5% Sometimes Interesting** **3% Boring**

8. I understand the material the instructor is teaching

45% All of the time **46% Most of the time** **9% Sometimes** **0% Never**

9. Have the goals and objectives of the course been met?

85% Yes **7% No**

STUDENT EVALUATION SURVEY SUMMARY

FORMATIVE EVALUATION - SUMMARY
NATIONAL WORKPLACE LITERACY GRANT

Student evaluations summarized from:
Cycle IV

Ray Harper - United Technologies	- SPC Simplified - Sessions I, II, III
Lou Taylor - Holnam	- Reading and Math, Basic Chemistry
Elizabeth Ray - Regional Medical Center	- Numbers and Charts, Basic Strategies in Reading II,

1. Up to this point, how would you rate this course?

   58% Excellent **35% Good** **6% Fair** **0% Poor**

2. The course is

   53% Very interesting **32% Interesting** **5% Sometimes interesting** **1% Boring**

3. I am encouraged to participate in class

   79% All of the time **16% Sometimes** **2% Never**

4. The books and materials used in the course are

   5% Very difficult **9% Difficult** **69% Just right** **15% Easy**

5. Do you feel that this course is helping you in your personal life?

   91% Yes **9% No**

6. Do you feel that this course is helping you do your job better?

   91% Yes **6% No**

7. The instructor is

   65% Very interesting **26% Interesting** **5% Sometimes Interesting** **3% Boring**

8. I understand the material the instructor is teaching

   45% All of the time **46% Most of the time** **9% Sometimes** **0% Never**

9. Have the goals and objectives of the course been met?

   85% Yes **7% No**

THE REGIONAL MEDICAL CENTER

SECURITY TASK ANALYSIS
EMERGENCY ROOM
January 21, 1994

Job Task	Skills Application
1. Read Bulletin Board for daily assignment.	1.1 Recognize common words and meanings. 1.2 Recognize meanings of common abbreviations and acronyms.
2. Conduct shift change. (done orally)	2.1 Determine the main idea. 2.2 Combining information from multiple sources.
3. Pick up Security Log Sheet. (activities during shift are documented on this sheet)	3.1 Entering appropriate information onto a form. 3.2 Writing key technical words accurately on forms. 3.3 Spelling task-related words and abbreviations correctly. 3.4 Recording essential information in phrases or simple sentence form accurately and precisely.
4. Pick up Daily Check-Off Sheet. (must be completed and turned in at the end of each shift)	4.1 Entering appropriate information onto a form. 4.2 Writing key technical words accurately on forms. 4.3 Spelling task-related words and abbreviations correctly. 4.4 Recording essential information in phrases or simple sentence form accurately and precisely.
5. Assist at the Emergency Room front desk. (fill out top portion of the Initial Registration & Triage form)	5.1 Transferring verbal information onto appropriate sections of forms. 5.2 Recording essential information in phrases or simple sentence form accurately and precisely.
6. Fill out an Occurrence Report (if some type of situation develops that may be questionable in the future a full report of the incident is needed)	6.1 Entering appropriate information onto a form. 6.2 Writing a report including necessary support documentation or classification. 6.3 Summarizing events and precise

	dialogue in an accurate, complete, and objective manner. 6.4 Selecting relevant details. 6.5 Arranging events sequentially. 6.6 Writing justifications for actions taken.
7. Control traffic in Emergency Room	7.1 Oral Communication skills
8. Monitor security cameras.	8.1 Decision Making skills
9. Prepare for arrival of MediVac. (Must set up 2 fire extinguishers near the landing pad. Also bring empty stretcher to landing pad.)	9.1 Following sequential directions to complete a task.
10. Fill out a Receipt of Property Form (If patient is admitted into hospital through Emergency Room, his valuables must be secured and placed in the safe.)	10.1 Entering appropriate information onto a form. 10.2 Spelling task-related words and abbreviations correctly. 10.3 Transferring numbers, codes, dates onto appropriate sections of forms.

Raymond Mack — Department Head — 2/16/94 — Date

Tammy Pressy — Security Officer — 2/16/94 — Date

Elizabeth Ray — Instructor — 2/16/94 — Date

TASK ANALYSIS
OCTOBER 13, 1993
NURSING ASSISTANTS
THE REGIONAL MEDICAL CENTER

JOB TASK	SKILLS APPLICATION
1.Checks board for assignments.	1.1 Recognizing common words and meanings 1.2 Reading room numbers 1.3 interpreting codes or clues.
2.Copies room numbers onto the assignment sheets-names are gotten from cardex or blue patient cards(look like credit cards).	2.1 Write multiple digit whole numbers 2.2 Entering appropriate information onto form 2.3 Transferring numbers from written sources onto appropriate sections of forms 2.4 Skimming and scanning to locate information.
3.Read information re: patients condition to determine who is served first.	3.1 Skimming and scanning to locate information 3.2 Comparing and contrasting 3.3 Distinguish between relevant and irrelevant information 3.4 Interpret codes and symbols.
4.Check cardex for new patients.	4.1 Recognizing technical meanings of task-related words 4.2 Skimming and scanning to locate relevant information 4.3 Determining technical usage of terms. 4.4 Interpreting codes and symbols.
5.Take vital signs(twice a shift 8:00am, 12:00pm).	5.1 Read numbers and symbols from temperature, pulse, respiration, and blood pressure measurement scales.
6.Enter vital signs onto assignment sheet.	6.1 Entering appropriate information onto form 6.2 Transferring numbers from measuring devices onto appropriate sections of form.
7.Report gross abnormalities to assigned nurse or charge nurse immediately.	7.1 Decision making skills. 7.2 Oral communication skills.

JOB TASK	SKILLS APPLICATION
8.Fills in I+O chart.	8.1 Read measurement devices 8.2 Write results on forms accurately and precisely 8.3 Recording essential information in phrases or simple sentence form 8.4 Write key technical words accurately on form 8.5 Transferring numbers, codes, times, onto appropriate section of form.
9.Give baths.	9.1 combining information from multiple sources to contribute to the completion of this task 9.2 Applying preventative measures prior to task to minimize problems 9.3 Using common knowledge for safety.
10.Check all patients before and during delivery of breakfast trays. Note what patient ate.	10.1 Recording essential information in phrases or simple sentence form accurately and precisely.
11.Make patient comfortable until you are able to assist them.	11.1 Decision making skills. 11.2 Oral communication skills 11.3 creative thinking skills.
12.Make beds.	12.1 Decision making skills to determine need of patient to be lifted.
13.Make sure patient does or does not need an overhead bar to assist in moving.	13.1 Decision making skills.
14.Read required materials and signing off on sheet.	14.1 Skimming and scanning information 14.2 Writing name accurately in appropriate space.

Jennifer K' Barnes
EMPLOYEE'S SIGNATURE

11-22-93
DATE

Mary Ann Cranshaw
SUPERVISOR'S SIGNATURE

11-11-93
DATE

VISIONS
THE REGIONAL MEDICAL CENTER

HOUSEKEEPER I

JOB TASK	SKILLS APPLICATION
1. Check in and receive assignments.	1.1 Recognize common words and meanings. 1.2 Read 2 or more column charts to obtain information in the future. 1.3 Locating chart information at intersections of rows and columns. 1.4 Read/write single and multiple digit whole numbers. 1.5 Read and write task related words.
2. Check cart inventory	2.1 Selecting parts of text or visual materials to complete a task. 2.2 Identifying similarities and differences in objects. 2.3 Classifying or matching objects by color, size, or name. 2.4 Recognizing task related words and meanings. 2.5 Reading 2 or more column charts to obtain information. 2.6 Following sequenced illustrations as a guide. 2.7 Add and subtract to determine number of items needed on the cart.
3. Clean offices and patients rooms.	3.1 Read/write single and multiple digit whole numbers. 3.2 Read office names and lab names. 3.3 Recognize symbols on walls and doors.
4. Utilize the 7 Step Cleaning Process.	4.1 Read task related words. 4.2 Read common words. 4.3 Follow sequential directions or steps.
5. Recognize appropriate chemicals to be used for different cleaning duties.	5.1 Must identify labels. 5.2 Match or classify by color, shape of bottle or significant markings. 5.3 Must identify differences between chemicals.

JOB TASK	SKILLS APPLICATION
6. Restock bathrooms and soap dispensers, etc...	6.1 Recognize meaning of certain offices with symbols on doors, walls, tissue, soap, etc. 6.2 Must add, subtract, and multiply to determine amount of items needed per room. 6.3 Read task related and common words.
7. Refill chemical bottles.	7.1 Read numbers or symbols from volume scales. 7.2 Read chemical labels. 7.3 Match appropriate label with appropriate bottle. 7.4 Read common fractions 7.5 Identify chemicals by color.
8. Be aware of hazard procedures.	8.1 Recognize caution symbols. 8.2 Recognize task related words. 8.3 Recognize cues that signify "caution is necessary". 8.4 Recognize cause and effect. 8.5 Using appropriate course of action in emergency situations. 8.6 Read MSDS sheets. 8.7 Read hazard warnings on labels.
9. Must document patient rooms cleaned.	9.1 Recognize common words 9.2 Write multiple digit numbers. 9.3 Write name on document.

Prepared by _____ Date 3-93

Verified by _____ Date 11-4-93

position Housekeeping Supervisor

Verified by Tonya D. Williams

VISIONS
THE REGIONAL MEDICAL CENTER

HOUSEKEEPER II
FIRST SHIFT

JOB TASK	SKILLS APPLICATION
1. Log daily tasks into log book if/when necessary.	1.1 Recognize common words with technical meanings. 1.2 Combine information from multiple sources that contribute to a completion of a task. 1.3 Use technical vocabulary to write daily log. 1.4 Write key technical words accurately on forms. 1.5 Spell task-related words correctly. 1.6 Enter appropriate information onto forms. 1.7 Record essential information in phrases accurately and precisely. 1.8 Transfer numbers, dates.
2. Check Educational Center schedule for cleaning assignments.	2.1 Recognize common words and meanings. 2.2 Skimming and scanning to determine relevant information. 2.3 Recognize task-related word with technical meanings. 2.4 Reading two or more column charts to obtain information. 2.5 Locating chart information at intersections of rows and columns. 2.6 Read/write single and multiple digit whole numbers.
3. Measure and mix chemicals to be put into carpet buffer machine.	3.1 Recognize common words and task-related words with technical meanings. 3.2 Following sequential directions to complete a task. 3.3 Skimming or scanning to determine whether or not a section contains relevant information. 3.4 Distinguishing between relevant and irrelevant information in text or visuals. 3.5 Classifying liquids by color or significant markings. 3.6 Using common knowledge for safety. 3.7 Selecting appropriate course of action in emergency. 3.8 Identify details, labels. 3.9 Following sequenced illustration as a guide.

JOB TASK	SKILLS APPLICATION
3. Continued...	**3.10** Read common fractions and single digit whole numbers. **3.11** Add common fractions and single digit whole numbers. **3.12** Read numbers or symbols from volume measuring scales. **3.13** Use a measuring device determine an objects volume in standard units. **3.14** Applying preventative measures prior to task to minimize problems.
4. Receive daily assignments and categorize according	**4.1** Read, write and count single digit whole numbers. **4.2** Put assignments into sequence.
5. Must report when incident or accident occurs on the job.	**5.1** Writing key technical words accurately on forms. **5.2** Spelling words correctly **5.3** Recording essential information in phrases or simple sentence form accurately and precisely. **5.4** Transferring numbers onto appropriate sections of forms. **5.5** Generating a written communication arranging events sequentially. **5.6** Writing brief justification for actions taken.
6. Must show courtesy to patients and visitors when cleaning rooms that are occupied.	**6.1** Communication skills.
7. Cleaning floors using vacuum or buffer, utilizing proper pro-precautions.	**7.1** Following sequential illustrations as a guide. 7.2 Combining information from multiple sources that contribute to the completion of a task. **7.3** Using common knowledge for safety. **7.4** Applying preventative measures prior to task to minimize problems. **7.5** Selecting appropriate course of action in an emergency situation.

JOB TASKS	SKILLS APPLICATION
8. New orders received throughout the day by use of voice beeper systems.	**8.1** Must recognize medical terminology (STAT or CODE RED). **8.2** Recognize names of departments, labs, offices. **8.3** Read and write single and multiple digit whole numbers. **8.4** Write key words to assist task completion.
9. Knowledge of communications MSDS, handling of needles and other harmful materials, urine clean-up.	**9.1** Using common knowledge for safety. 9.2 Applying preventive measures prior to task to minimize problems. **9.3** Selecting appropriate course of action in emergency **9.4** Locating relevant information in safety manuals, labels, MSDS sheets. **9.5** Recognize task-related words and meanings. **9.6** Recognize common abbreviations. **9.7** Following sequential directions.
9. Continued...	**9.8** Locating pages, titles, paragraphs, figures or charts needed to answer questions or solve problems. **9.9** Skimming or scanning to determine if text contains relevant information.
10. Drain and clean buffer using outlined steps.	**10.1** Ability to read, comprehend and to follow sequential instructions.

Prepared by [signature] Date 11-4-98

Verified by [signature] Date 11-4-98

position Housekeeper II

Verified by [signature]

position Supervisor

VISIONS
THE REGIONAL MEDICAL CENTER

HOUSEKEEPING SUPERVISOR

TASK	SKILLS APPLICATION
1. sign in employees at beginning of shift	1.1 Locating chart information intersecting rows and columns. 1.2 Skimming & scanning 1.3 Entering names of forms
2. assign projects to project people.	2.1 Recognizing common words and meanings. 2.2 Reading schedules 2.3 Problem solving to determine duties for specific people.
3. begin daily inspections of discharge rooms in different areas of hospital. Use the Supervisor's Weekly Report form.	3.1 Recognize task related and common words and meanings 3.2 Following sequential directions to complete task 3.3 Identifying similarities and differences in objects. 3.4 Determine the presence of a defect 3.5 Writing key words on forms accurately 3.6 Spelling correctly on forms
4. consult with department heads when inspecting areas of hospital. fill out necessary form and get department head signature.	4.1 Oral communication skills 4.2 Entering appropriate information on forms 4.3 Writing essential information in phrases or simple sentences form 4.4 Spelling task-related words correctly
5. conduct patient interviews using the necessary interview form.	5.1 Oral communication skills 5.2 Problem solving skills 5.3 Filling out forms accurately 5.4 Spelling related words correctly

6.	evaluate employees for pay increases. Fill out necessary forms.	6.1 Entering appropriate information 6.2 Writing a brief report in simple sentence or paragraph form 6.3 Selecting relevant details for report 6.4 Spelling accurately 6.5 Following sequential directions
7.	conduct training of new employees and retraining of current employees. Must use necessary forms.	7.1 Writing brief descriptive reports 7.2 Be familiar with chemical names 7.3 The process of mixing chemicals 7.4 Know procedure to prevent problems with chemicals safety precautions. Be familiar with proper use of equipment.

Prepared by _____ Date 11-3-93

Verified by _____ Date 11-4-93

position Shift Supervisor

Verified by _____

position Supervisor

Literacy Task Analysis
The Regional Medical Center

Position: Patient Account Representative
Patient Account Management Department
September 7, 1994

Basic Responsibility: To manage/handle inquiries relevant to patient billing process.

Job Task	Skill Application
1. Log on computer to update/review past accounts.	1.1 Follow procedural directions. 1.2 Have thorough knowledge of computer/billing procedures. 1.3 Using categorizing, clarifying coding system. 1.4 Sequence billing procedure. 1.5 Identify billing procedure. 1.6 Draw conclusions. 1.7 Knowing medical terminology.
2. Greet customers. Enter personal code for each customer.	2.1 Thorough knowledge of coding/ billing methods. 2.2 Listen/respond to questions asked. 2.3 Formulate relative questions.
3.1 Calculate bills/balances.	3.1 Classify/categorize information.
3.2 Discuss payment policy (insurance, cash, check, other).	3.2 Use coding system correctly.
3.3 Make referrals to correct patient representative.	3.3 Follow billing sequence.
3.4 Identify payment process.	3.4 Make notations of information received for supervisor/personal review.
3.5 Accept payment (cash, insurance, check, etc.)	3.5 Count cash.

4.1 Identify/categorize items billed by department. 4.2 Record information on proper form.	4.1 Classify and categorize information. 4.2 Follow procedural information. 4.3 Listen/respond to questions asked.
5. Document.	5.1 Provide customer with an itemized billing statement, receipt.
6. Recognize situation requiring use of standard procedure and apply sequential styles to perform procedure, request assistance from supervisor/staff as needed.	6.1 Making decisions. 6.2 Formulating questions. 6.3 Listening/responding. 6.4 Predict outcome. 6.5 Basic communication skills.

Supervisor's Signature — Date: 9/12/94

Employee's Signature — Date: 9/12/94

Instructor's Signature — Date: 9/12/94

Literacy Task Analysis
The Regional Medical Center

Position: Patient Account Representative
Job Task: Handling Customer Telephone Inquiries about Billing
Date: August 30, 1994

Job Subtasks	Literacy Skill Applications
1. Greets patients calls via telephone. Assesses customer record by logging name into computer; verifies correct file.	1.1 Follow procedural directions (Logs on name.) 1.2 Draws conclusions. 1.3 Use of symbols codes (to verify correct file). 1.4 Knowledge of keyboarding. 1.5 Sequence steps in procedure.
2. Reads screen, scans to assess patient problem with account; reiterates problem back to customer (i.e., secondary insurance has not paid) determines if problem better handled by others in billing; redirects call if so; if not, advises customer on suggestions for reconciling bill.	2.1 Skimming and scanning. 2.2 Draws conclusions. 2.3 Follow sequential steps in a procedure. 2.4 Formulates questions. 2.5 Listening and responding. 2.6 Handling anger in a positive way. 2.7 Categorizing and classifying.
3. Offers suggestions to customers to reconcile bill (Must reference hospital criteria for amount of debt; customer calls insurance company if below a certain amount, otherwise hospital calls).	3.1 Decision-making skills. 3.2 Predict outcomes. 3.3 Referencing skills. 3.4 Summarizing. 3.5 Listening and responding. 3.6 Basic communication skills. 3.7 Combining information from multiple resources.

4. Handles patient (customer) anger and frustration.	4.1 Basic communication skills. 4.2 Decision-making skills. 4.3 Utilizing coping skills.
5. Make itemized copies of customer bills upon request; prepare for mailing.	5.1 Keyboarding skills.
6. Sums up in report form transaction with customer and logs on to computer into patient file.	6.1 Entering information correctly onto forms (information transfer). 6.2 Classifying and categorizing information. 6.3 Summarizing. 6.4 Note-taking skills. 6.5 Written communication skills. 6.6 Selecting relevant details. 6.7 Writing brief, descriptive accounts of activities or transactions performed.

Department Head — Date: 9-5-94

Employee — Date: 9-9-94

Instructor — Date: 9/9/94

Position: Ast. Supervisor at **HOLNAM**
Job Task: Dept. Overview
Department: Utility

Job Subtasks	Literacy Skills Applied
1. Inventory Brick Warehouse	1.1 Counting 1.2 Compare/contrast 1.3 Using charts - info on computer 1.4 Locating information
2. Update Daily Computer List * Kiln * General Cleaning * Special Projects * Monthly Reports	2.1 Enter correct data 2.2 Reading cross referencing
3. Measure Tape for Bricks, Shims, and Brick Drillings	3.1 Measurement - read tape to 1/16 inch 3.2 Compare/contrast - identify differences in shims 3.3 Reading Comprehension 3.4 Critical Thinking
4. Shift Log	4.1 Literal comprehension 4.2 Recognize workplace vocabulary 4.3 Predicting outcomes
5. Clean-up Procedures	5.1 Using charts & schematics - apply mechanical skills 5.2 Compare/contrast - combining info to complete task 5.3 Decision Making 5.4 Locating Equipment and General Knowledge of Plant Facility
6. Computerized Maintenance Management Booklet * info to charge supplies * all plant information	6.1 Literal comprehension 6.2 Compare/contrast 6.3 Locating information 6.4 Recognize workplace vocabulary

Position: Ast. Supervisor at HOLNAM
Job Task: Dept. Overview
Department: Utility

Job Subtasks	Literacy Skills Applied
7. Screening of "balls"	7.1 Measurement and calculation - reading numbers from scale - recording and sorting by weight - using micrometer - mechanical skills 7.2 Information Transfer

Comments: Morris Wright, Ast. Supv. of the Utility Dept., conducted a tour of the plant showing and explaining the assorted processes that the Utility Dept. performs. The above analysis was generated from that session with Morris. This document lists a few of the jobs performed by the department which performs the function of maintenance services throughout the plant.

revised: 9/22/93

Prepared By: Lori Hafer Date: 9/23/93

Verified By: Morris Wright Date: 9/23/93

Position: Maintenance Mechanic at HOLNAM
Job Task: Build a Guard for Coupling
Department: Maintenance

Job Subtasks		Literacy Skills Applied
1.	Read Description of Work detailed on Work Order.	1.1 Recognize technical vocabulary 1.2 Literal Comprehension 1.3 Cause and effect recognizing common knowledge for safety
2.	Determine Size and Dimensions	2.1 Locating information 2.2 Measurement calculations. Using a tape to measure existing guard 2.3 Measure guard for another motor to get proper measurements
3.	Draw Diagram of Finished Guard	3.1 Interpret information (use measurements to draw dimensions of finished product) 3.2 BEYOND BASICS a knowledge of Geometry is needed in order to figure angles & curves
4.	Cut Materials With Bandsaw or Torch.	4.1 Cause and effect 4.2 Measurement 4.3 Percents needed to figure mix for torch
5.	Assemble Guard	5.1 Sequencing
6.	Install Finished Guard	6.1 Following directions 6.2 Cause and effect

Job Subtasks	Literacy Skills Applied
7. Sign off on Work Order	7.1 Information transfer (number & codes on equipment used and summarize action taken to complete) 7.2 Literal comprehension

COMMENTS: During the performance of the above job task, we were interrupted for an emergency repair to a crane bucket. The worker had to stop working on the guard and repair the crane bucket. I also followed on the crane bucket repair and those tasks performed follow.

Position: Maintenance Mechanic at HOLNAM
Job Task: Repair Tear in Crane Bucket
Department: Maintenance

Job Subtasks	Literacy Skill Applied
1. On Verbal Instruction From Supervisor Stops Work and Goes to Weld Crane Bucket.	1.1 Following Direction (oral)
2. Go To Site and Check What Supplies are Needed.	2.1 Visual Discrimination 2.2 Drawing Conclusions-- (no work order exists yet, need to make list of materials)
3. Talk to Crane Operator.	3.1 Communication skills -have crane positioned to for repair 3.2 Measure - size of split 3.3 Decision making -how to repair

Job Subtasks		Literacy Skills Applied
4.	Report to Supervisor	4.1 Communication skills 4.2 Problem solving
5.	Assemble Portable Equipment Needed	5.1 Decision making 5.2 Compare/contrast 5.3 Predicting outcomes
6.	Begin cleaning crane bucket seam	6.1 Problem solving -split larger than thought 6.2 Decision making 6.3 Communication skills -report to shop
7.	Assemble Additional Materials	7.1 Measure angle irons 7.2 %age of mix to cut
	and Repair	8.1 Cause and effect -knowledge of safety
	ork Order and ff on Repair	9.1 Locating Information 9.2 Information Transfer 9.3 Summarize

3/93

Date: 9/24/93

Date: 9-24-93

Position: Utilityman (Inside & Outside) at HOLNAM
Job Task: Performing Outside Checks (some inside on-call)
Department: Production

Job Subtasks	Literacy Skills Applied
1. Kiln Checks---	1.1 Compare/Contrast
*Drive Assemblies	1.2 Using Technical Vocab.
*Clinker Cooling Dept.	1.3 Reading Dials and Gages
*ID Fan	1.4 Information Transfer
*Precipitator & related equipment	1.5 Decision Making
*Fuel Systems	1.6 Problem Solving
*Kiln Bearing, Rolls, Tires	1.7 Sequencing
2. Synfuel Storage	2.1 Use senses of sight & smell to check for for possible leaks or any problems
*Visual Inspection of area	2.2 Knowledge of technical vocabulary
*Daily checklist	2.3 Check off list for documentation
	2.4 Record problems on form
	2.5 Problem solving.
3. Kiln Opacity	
*Visual check of stacks - requires previous training must be certified to perform	3.1 Visual measure of emission clarity
	3.2 Record data on form.
	3.3 Knowledge of tech. vocabulary
	3.4 Decision Making
	3.5 Compare/Contrast
	3.6 Math - calculate averages

Job Subtasks	Literacy Skills Applied
4. Slurry Storage & Kiln Feed *Kiln Feed Pumps *Transfer Pumps *Agitator Drives *Agitation Air Compressors *Piping and Valves	4.1 Compare/Contrast 4.2 Listening Skills 4.3 Information Transfer 4.4 Read gages and digital displays.
5. Cement Storage *Top of Silo Dust Collectors *Silo Valves	5.1 Compare/Contrast 5.2 Visual Discrimination 5.3 Decision Making 5.4 Problem Solving
6. Complete Shift Checklist	6.1 Information Transfer (record info. on prepared checklist)

Comments: The job of Utilityman is one of the most demanding in the plant mainly due to the fact that this person covers the entire plant in a given shift. Readings are taken from both digital and analog gages and dials then recorded on forms kept in the area. The utilitymen do not take forms with them rather the forms are kept in the area of the equipment to be monitored. This job contains a good bit of problem solving (called troubleshooting). Decisions to be made on the spot often with the assistance of the control operator or the shift supervisor. Quite often the utilityman has to make the call whether to fix the problem themselves or to have a maintenance referral made.

revised: 9/23/93

Prepared by: Lori Taylor Date: 9/24/93

Verified by: David Knight Date: 10/21/93

LITERACY TASK ANALYSIS - UNITED TECHNOLOGIES

Job Title: Assembler, Wire Harness
Job Task: String circuit wire harness assembly

Subtasks	Literacy Skill Applications
Step 1-Assemble connector unit	
1. Inspect soldered ends of wires (terminals) and inverter unit before use.	1.A-recognize common and task-related words and meanings. 1.B-determining presence of a defect or extent of damage.
2. Insert wedge in pneumatic fixture, position connector on top.	none
3. Insert wires and inverter unit into connector. Follow color-coded schematic at operator's station. Push button to operate pneumatic.	3.A-identify components within a schematic 3.B-identify similarities and differences in objects
4. Remove connector and perform visual check for correct terminal and wedge position.	4.A- same as 3B
5. Mark connector to indicate day or night shift production.	none
6. Disassemble and rework defective parts returned by tester, step 2.	6.A- same as 3B 6.B- same as 1B
Step 2-Test completed connector units	
7. Place tape on holder and put retainer on holder. Plug completed connector into testing unit.	7.A- same as 3A 7.B-identify parts of an illustration 7.C-follow sequenced illustrations as a guide
8. Attach inverter wire ends (2) to testing clips following color- coded wire diagram on operator board. Push button to test inverter wires.	8.A- same as 7C 8.B-matching objects by color or significant maarking.

9.	Attach remaining wires to test clips, following color coded operator diagram. Position thumbs in electric eye to test.	9.A- same as 8B 9.B-identifying components within a schematic 9.C-using common knowledge for safety
10.	In case of inverter or wire defect, bend affected wire(s) return part to first operator for repair, or replacement of inverter unit.	none
11.	Read computer test unit panel, listen for "chirping" sound indicating successful test.	11.A-distinguish between relevant and irrelevant information in visuals
12.	Measure and cut "cavalier tubing" equal to longest wire, and position with wires.	12.A-matching objects by size
13.	Wrap tape around retainer and wires. Wrap one length of tape around each side of retainer and inverter unit.	none
Step 3-Wrap wires and complete harness		
14.	Wrap entire wire length with wrap tape, wrap cloth tape to seal retainer.	none
15.	Put conduit on and seal ends with tape. Wrap ID tape around end.	15.A- same as 3B
16.	Insert wire ends in fixture, clip ends.	none
17.	All operators are responsible for notifying material handlers of supplies needed. Reference is made to a components board, with item samples and part numbers. Notification is made orally.	17.A- same as 11A 17.B-combining information from several sources that contribute to completion of a task.
18.	All operators keep track of production, to compare to a standard given them each day.	18.A-count multiple digit whole numbers to complete a subtask 18.B-follow sequential directions to complete a task

Verified by assembler Mary L. Reeding Date 10-5-93

Verified by supervisor [signature] Date 10/2/93

LITERACY TASK ANALYSIS - UNITED TECHNOLOGIES

Job Title: Assembler
Job Task: Traction Control Disable Switch Assembly

Subtasks	Literacy Skill Applications
1. Test button for defects in visuals.	1.A-identify similarities and differences in objects.
2. Flip button, position on holder, insert spring and place ball bearing on spring.	2.A-following sequential directions to complete a task.
3. Select housing, visually inspect for defects, and place on holder. Insert gasket onto housing and push into opening. Flip housing onto holder to lube.	3.A-same as 1A. 3.B-determining presence of a defect or extent of damage. 3.C-same as 2A.
4. Flip housing unit and push onto button assembly.	4.A-same as 2A.
5. Select terminal block and put on fixture to lube. Insert spring leap in carrier, and slide loaded spring leap into terminal block.	5.A-same as 2A.
6. Pick up housing unit, flip, and push onto terminal block. Manually test switch/button. Insert bulb in side and tighten with screwdriver.	6.A-same as 1A. 6.B-same as 2A.
7. Place completed switch in testing unit. If accepted, visually check date code for legibility.	7.A-same as 1A. 7.B-same as 2A.
8. If unit is rejected by computer testing unit, compare message with Confidence Unit Check Sheet for cause of identified problem. Disassemble unit, replace defective part and retest.	8.A-same as 1A. 8.B-recognizing common and task-related words and meanings. 8.C-locating information at intersections of rows and columns. 8.D-applying information from tables to locate malfunctions or select actions.

9.	Check computer test unit every morning and after lunch by inserting identified detective parts and checking for correct defect message on computer test readout. Complete Confidence Unit Check Off Sheet.	9.A-combining information from multiple sources that contribute to completion of a task. 9.B-same as 8B. 9.C-entering appropriate information onto a form.
10.	Set date code on computer test unit every morning. Find correct code on Date Code Sheet.	10.A-same as 8C.
11.	Complete Daily Audit Report.	11.A-same as 8C. 11.B-same as 9C.
12.	Tell material handler when parts are needed (oral communications). Find part number, name, and description on Bill of Material.	12.A-same as 8D.
13.	Complete box label with date and box number and attach to completed carton.	13.A-same as 9C.
14.	Complete Final Test Reject Sheet. Total tallies of each defect description, and enter totals in correct column. Add defect totals and total pieces completed.	14.A-same as 9C. 14.B-same as 9A. 14.C-reading, writing and counting single and multiple digit whole numbers to complete a subtask. 14.D-adding, subtracting and multiplying single and multiple digit numbers to complete a subtask.

Verified by assembler Francina Sabb Date 10-25-93

Verified by supervisor Hilda Lynch Date 11-5-93

TASK ANALYSIS

UNITED TECHNOLOGIES AUTOMOTIVE

JOB TITLE: TESTER, STOP LAMP BREAKER SWITCH

JOB TASK: TEST AND PACK

SUBTASKS	SKILL APPLICATIONS
1. Run two test break switches through confidence check to ensure tester is functioning correctly.	1. Compehend specifications and apply tolerances. Add and subract decimals and fractions. Comprehend metrics.
Log results of check on Confidence Unit Check-off Sheet	Transferring numbers from equipment onto appropriate sections of forms.
2. Place switch onto fixture. Place tab on top of switch and ground switch.	Follow sequential information as a guide.
Start test by pressing the start button on the tester.	NONE
Check to see if tab pushes actuator pin flush to the top of threads on the switch. If not, press the reset button and restart.	Visual check Selecting appropriate course of action.
3. Take three readings from the tester and log: a. Travel at Make b. Max Travel c. Force Max	Ability to identify and memorize numbers. Comprehend specifications and apply tolerances. Use problem solving skills to determine the presence of a defect.
Check switch's actuator pin for proper resistance.	Physical test. Determine when switch is defective.
4. Pack on tray to send to Auditors	NONE
5. After testing 240 switches, log and graph number of rejects on control chart. Insert time of day.	Ability to plot points on a graph

TASK ANALYSIS CONTINUED

INSTRUCTOR Jacqueline Hulse DATE 21 February 1994

EMPLOYEE Lavern Glover DATE 2-21-94

SUPERVISOR Claire Wise DATE 2-21-94

TASK ANALYSIS

UNITED TECHNOLOGIES AUTOMOTIVE

JOB TITLE: RECEIVING INSPECTOR

JOB TASK: INSPECTION

SUBTASKS	SKILL APPLICATIONS
1. GO INTO RECEIVING AND RETRIEVE PARTS TO BE INSPECTED FROM PALATE. CHECK TO SEE IF THERE ARE ***"HOT"*** PARTS NEEDING INSPECTION.	1. ABILITY TO FOLLOW DIRECTIONS FROM ASSIGNMENT SHEET AND ORALLY FROM SUPERVISOR.
2. CHECK TO SEE IF READABLE BARCODES ARE PRESENT ON BOXES CONTAINING PARTS.	2. VISUAL CHECK
3. RANDOMLY SELECT 50 SAMPLE PARTS FROM EACH BATCH OF PARTS TO BE INSPECTED.	3. ABILITY TO COUNT AND RECOGNIZE NUMBERS.
4. RETURN TO INSPECTION SITE TO INSPECT PARTS.	4. NONE
5. RETRIEVE BLUEPRINT OF PART FROM FILES VIA PART NUMBER.	5. ABILITY TO "READ" NUMBERS. ABILITY TO UTILIZE FILING SYSTEM. ABILITY TO UTILIZE PERTINENT INFORMATION FROM THE TITLE BLOCK OF BLUEPRINTS.
6. USING COMPUTER, GO TO "WAREHOUSE" SCREEN ON COMPUTER; LOCATE AND SELECT RELEVANT PART NUMBER; ENTER "QCPEND" FOR PENDING.	7. ABILITY TO USE COMPUTER AND VARIOUS FUNCTIONS KEYS ON COMPUTERS.
7. USING COMPUTER GO TO "INSPECTION INSTRUCTION/RESULTS" SCREEN WHICH LISTS ALL OF THE DIMENSIONS ON THE PART TO BE INSPECTED.	8. SAME AS ABOVE
8. VISUALLY COMPARE PART TO PRINT.	9. VISUAL INSPECTION.
9. REFERRING TO PRINT AND DIMENSIONS OUTLINED ON THE SCREEN, USE CALIPERS TO MEASURE DIMENSIONS ON THE PART.	10. ABILITY TO USE AND READ CALIPERS. ABILITY TO INTERPRET BLUEPRINTS.

10. ENTER HIGHEST AND LOWEST DIMENSION FOR EVERY 50 SAMPLE PARTS ON COMPUTER. ENTER "A" OR "R" FOR ACCEPTED OR REJECTED. IF "R" ENTER# OF REJECTED PIECES. HIT F8 TO CHECK FOR A SECOND PAGE OF DIMENSIONS.	11. ABILITY TO INTERPRET AND ANALYZE NUMBERS. ABILITY TO DETERMINE IF A NUMBER IS WITHIN TOLERANCE OF A GIVEN SPECIFICATION. ABILITY TO USE COMPUTERS AND FUNCTION KEYS. ABILITY TO WORK INDEPENDENTLY.
11. HIT "CLEAR" TO GO TO "ID ON MATERIAL" SCREEN. ENTER "C" FOR STATUS TO CLEAR THE PART FROM THE COMPUTER.	12. ABILITY TO USE COMPUTER AND FUNCTION KEYS. ABILITY TO WORK INDEPENDENTLY.
12. FILL OUT REJECT OR ACCEPT INSPECTION STICKERS.	13. ABILITY TO WRITE.
13. RETURN BLUEPRINTS TO FILE	14. ABILITY TO UTILIZE FILING SYSTEM.
14. RETURN SAMPLE PARTS TO RECEIVING TO THEIR PERSPECTIVE BOXES. APPLY "ACCEPTED" STICKER TO BOX TO GIVE CLEARANCE TO THE STOCKROOM. APPLY "REJECTED" STICKER TO BOX TO AWAIT DISPOSITION FROM SUPERVISOR.	15. ABILITY TO FOLLOW DIRECTIONS. ABILITY TO WORK INDEPENDENTLY.

Jacqueline Shuler — 2 June 94
JACQUELINE SHULER, INSTRUCTOR — DATE

Allen Richardson — 6-2-94
ALLEN RICHARDSON, SUPERVISOR — DATE

Joyce J. Boneparte — June 2, 1994
JOYCE BONEPARTE, EMPLOYEE — DATE

PROJECT VISIONS RETENTION

PLAN

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THE SCOPE AND NATURE OF RETENTION PLAN

The retention program herein has been developed by Project VISIONS. The methods and procedures will be employed at three partnership sites: Holnam Cement Company, Holly Hill, SC; United Technologies, St. Matthews, SC; and The Regional Medical Center, Orangeburg, SC.

in the effort to identify and address retentional problems, the VISIONS Retention Plan is multi-faceted, designed to monitor many factors that precipitate withdrawal, e.g. absenteeism, student classroom behavior, instructors' teaching methods and material. The rationale is that if these factors that influence retention are monitored carefully, student withdrawal can be minimized.

The Staff of VISIONS has taken great care in the identification of pre-exiting factors that will affect student persistency as well as anticipating other problems and concerns that may arise. Of course, our retention plan cannot address all the factors that may have a negative effect on retention; the staff of VISIONS clearly realized that point. That is why great steps have been taken to address general adult education retentional problems that are present at all three sites; while at the same time give consideration to those problems and concerns that are not completely correctable, but whose negative effects may be mitigated.

SUPPORT AND EDUCATIONAL COUNSELING

Counseling is an essential element, it will undergird the VISIONS retention program. The Program Counselor will be responsible for monitoring retention and providing educational and support counseling to each participant in the program. The duties of the Program Counselor are:

* Serve as the Individualized Educational Plan (IEP) Coordinator. The Counselor will meet with each student to design an IEP. This will allow each student to discuss his or her educational and personal goals. The Counselor will aid each student in setting realistic goals.

* The Counselor will provide support counseling. Each student will meet with the counselor once a month. The purpose of the Counseling sessions is to monitor each student's progress and address concerns and problems.

* The Counselor will be responsible for monitoring absenteeism. Each week the Counselor will meet with the Instructors and the Project Director to discuss problems or concerns.

* The Counselor will conduct classroom observations and administer student class evaluation surveys.

By implementing the above outlined procedures, the Counselor will be in a position to detect and address problems and concerns that may affect retention.

EARLY WARNING SIGN DETECTION

One of the most important features of an effective retention program is the ability to detect precipitating problems or concernments that may suggest that a student is contemplating withdrawing from the program. Normally, a student will display particular types of behaviors when he or she is discontent with an educational program or aspects of it. Such behavior can be classified as Early Warning Signs. The rationale is that if these signs are detected early, interventive and corrective measures can be taken.

Three methods will be employed in the detection of early warning signs: The Instructor's Observation Form, The Student Evaluation Survey, and Counseling Sessions.

INSTRUCTOR'S OBSERVATION FORM: Indeed, no one is in a better position to detect signs that may precipitate withdrawal than the instructor. The attitude and behavior of a student in the classroom can yield clues regarding the student's sentiments about the class, the material, or the instructor's manner of teaching. When observing, the instructor should be sensitive to the following behavior:

* Lack of interest

* Non-Participation

* Negative Attitude

* Student Interaction

Each student will be evaluated on a monthly basis. The instructor and the counselor will discuss the observational data and initiate steps to address problems.

THE STUDENT EVALUATION SURVEY: The purpose of this survey is to ascertain the students' sentiments regarding the class, e.g. subject interest, relevancy of material,

instructional methods. This instrument will provide the instructor with a mirror which can yield information that may suggest that adjustments in teaching methods or classroom activities are warranted. The student evaluation survey will be conducted twice during each 13 week class cycle.

COUNSELING SESSIONS: The Program Counselor will meet with each student on a monthly basis to discuss the student's educational progress as well as problems and concerns that a student may have. In additional to monthly counseling sessions, the Counselor will respond to Counseling Referrals originated by the instructors when a problem arises that warrants immediate attention. The Counselor will discuss the problem with the student, and then inform the instructor of his or her evaluations and recommendation.

ABSENTEEISM POLICY AND PROCEDURES

Absenteeism is a major concern of the retention program. Because repeated absences may signal that a problem has arisen which may precipitate withdrawal, it is imperative to ascertain the reasons why. Moreover, completion of a 13 week class cycle requires, at the minimum, 80% attendance or 32 hours of instruction; this leaves very little leeway for excessive absenteeism.

In addressing the problem of absenteeism, the following procedures will be employed:

* When a student is absent for three hours of instruction, he or she will receive a "We miss you letter". The letter will express the sentiment that the student's presence was dearly missed. The instructor will be responsible for originating the letter.

* When a student's absenteeism exceeds 6 consecutive hours or 8 hours of instruction within a 3 week period, a referral form is to be submitted to the Counselor. In this step, the instructor will originate a counselor referral form. The Counselor will schedule a time to meet with the student to discuss the reasons for the absences, as well as possible remedies. Finally, the counselor will complete the counselor's response section of the form and provide the instructor with a copy.

* Once a student's absences exceed 8 instructional hours, the instructor will meet with the student to discuss the possibility of make-up hours or the option of enrolling in the next session. The student will still be encouraged to attend classes.

It is important to state that no student will be expelled from the program because of excessive absenteeism. While it is true that a student must attend a minimum of 32 hours to complete the program, efforts will still be made to encourage participation from those students who display attendance problems.

SITUATIONAL PROBLEMS

From the outset, there are factors that will have an anticipated negative effect on retention. The staff of VISIONS has endeavored diligently to identify and address those factors, with the understanding that although there are specific problematic circumstances that can not be completely remedied, steps can be taken to mitigate their negative effects. There are three factors that will present retentional problems: Class time, Transportation, and Child Care.

CLASS TIME: The ideal time to offer classes would be during the student's working hours. Lucidly stated, the employer pays the employee for attending classes by virtue of allowing the employer to attend classes on the clock.

Unfortunately, The VISIONS participant will attend classes after or before work. This will require them to make some sacrifices and arrangements, as well as volitional efforts. Students at Holnam work a rotational schedule; fatigue will be a factor.

Prospective students at The Regional Medical Center expressed, during the recruiting stage, that they are tired after work. Moreover, many of the participants at TRMC are older between 40-50 years of age. They are accustomed to going home and doing domestic chores. To them, these functions are extremely important.

EFFORTS TO ADDRESS PROBLEM: The class time is an immutable factor; thus, efforts have been taken to express to each prospect that participation in the program will lead to personal and occupational enhancements. Each prospect must understand that he or she must make some personal efforts, and yes sacrifices, in this endeavor. Steps have been taken to make the classes pleasant and relaxing. The instructional time is only three hours a week, requiring a commitment of two days a week. This is not too much to ask.

TRANSPORTATION:

Transportation is a problematic factor at The Regional Medical Center. Many of the prospects car pool, which means that those persons who are willing to attend but do not drive will only be able to attend if the driver attends.

EFFORTS TO ADDRESS PROBLEM: This is a difficult matter to address for Orangeburg County does not have a mass transportation system. Car pooling is the only mode of transportation for the prospects.

Efforts have been made to encourage both the drivers and passengers to attend classes. Under circumstances in which the passenger desires to attend but the driver does not, it has been suggested that the passenger pool with a driver who desires to attend classes.

To aid in this matter, The Director of Environmental Services has stated that he would be willing to alter the work schedule to pair passengers with drivers who want to attend classes. Other avenues have been explored, but this is the most feasible course of action.

CHILD CARE: After work child care will present a problem for some prospects at United Technologies. Employees on first shift work from 7:00 a.m. to 3:30 p.m. This schedule works well for those employees who have children that attend school because they can pick their children up after work or the child can wait after school for short period of time until the parent arrives.

This presents a problem for those persons who desire to attend classes; they would have to make special arrangements for child care on days classes are held.

EFFORTS TO ADDRESS PROBLEM: Efforts have made to explore after school programs that provide child care to parents who are enrolled in educational classes within Calhoun County. Three schools either currently have, or may have in the future, some form of after-school assistance program available:

* St. John's: is scheduled to have a program operational by September 8. The program will be for 3-to-5 year olds.

* Guinyard: Does not currently have a program, but has applied for fundings to begin a program.

* Bethlehem: has a program for 6-12 year olds who are deemed "at risk". The program may accommodate UT employees' children.

Follow-up steps will be taken to ascertain the possibility of utilizing these programs now or in the future.

INCENTIVES

To encourage attendance and participation, it was suggested to each partner to provide incentives to those employees participating in the program. The incentives are contingent on attendance.

HOLNAM

* Each participant will be remunerated $10.00 an hour for each hour attended.

* At the end of the 13 week cycle, those students who completed the program with acceptable attendance will receive a Completion Certificate, which will be presented at an awards dinner.

THE REGIONAL MEDICAL CENTER

* For each 6 hrs. of attendance the employee will receive 2 hours off with pay.

* Each employee who has perfect attendance will receive an additional 4 hrs. off with pay.

* For each week the employee attends 3 hrs. or more they will receive a free meal in the cafeteria.

* In addition there are other incentives such as gift bags, free desserts, etc. that will be used during the course of the program for individual achievements.

* At the end of the 13 week cycle, those students who completed with acceptable attendance will receive a Completion Certificate, to be awarded at an awards dinner.

UNITED TECHNOLOGIES

* At the present time, United Technologies has not offered any incentives to its participating employees.

STUDENT EVALUATION SURVEY

Site _____

1. Up to this point, how would you rate this course?
   ____ Excellent ____ Good ____ Fair ____ Poor

2. The course is
   ___ Very interesting ___ Interesting ___ Sometimes interesting ___ Boring

3. I am encourage to participate in class
   ____ All of the time ____ Sometimes ____ Never

4. The books and materials used in the course are
   ____ Very difficult ____ Difficult ____ Just right ____ Easy

5. Do you feel that this course is helping you in your personal life?
   ____ Yes ____ No

6. Do you feel that this course is helping you do your job better?
   ____ Yes ____ No

7. The instructor is
   ___ Very interesting ___ Interesting ___ Sometimes Interesting ___ Boring

8. I understand the material the instructor is teaching
   ____ All of the time ____ Most of the time ___ Sometimes ___ Never

9. What do you like about the course?_____

   _____

   _____

10. What do you dislike about the course?_____

    _____

    _____

11. If you would change anything about this course to make it better, what would it be?

    _____

    _____

    _____

COUNSELING REFERRAL FORM

TO:

FROM:

DATE:

STUDENT:

Description of Problem:

Counselor's Response:

Counselor's Signature Date Revised 6/10/94

POST-STUDENT EVALUATION SURVEY

Site _____

1. How would you rate the course?
   ____ Excellent ____ Good ____ Fair ____ Poor

2. The course was
   ___ Very interesting ___ Interesting ___ Sometimes interesting ___ Boring

3. I was encouraged to participate in class
   ____ All of the time ____ Sometimes ____ Never

4. The books and materials used in the course were
   ____ Very difficult ____ Difficult ____ Just right ____ Easy

5. Do you feel that the course helped you in your personal life?
   ____ Yes ____ No

6. Do you feel that the course helped you do your job better?
   ____ Yes ____ No

7. The instructor was
   ___ Very interesting ___ Interesting ___ Sometimes Interesting ___ Boring

8. I understood the material the instructor taught
   ____ All of the time ____ Most of the time ___ Sometimes ___ Never

9. What did you like about the course?_____

   _____

   _____

10. What did you dislike about the course?_____

    _____

    _____

11. If you would change anything about the course to make it better, what would it be?

    _____

    _____

    _____

INDIVIDUAL EDUCATION PLAN

Name:_____ SS#:_____ Current Position:_____

Company:_____ Date:_____

GOALS	PRESCRIPTION	MEASURABILITY
Short Term:_____		
Long Term:_____		
Personal:_____		

Comments:_____ Test Scores

Privacy Statement: I understand that the information contained on this form is strictly confidential and available only to the employee and to Orangeburg-Calhoun Technical College personnel.

_____ _____ _____ _____

Employee's Signature Date Counselor's Signature Date

_____ _____

Instructor's Signature Date

Revised 6/10/94

EXTERNAL EVALUATION REPORT OF THE NATIONAL WORKPLACE LITERACY DEMONSTRATION GRANT:

THE VISIONS PROJECT

ORANGEBURG-CALHOUN TECHNICAL COLLEGE
ORANGEBURG, S.C.

FINAL EVALUATION REPORT

SUBMITTED BY:

KARL 0. HAIGLER

THE SALEM COMPANY

FEBRUARY 15,1995

I. SCOPE OF EVALUATION:

This report spans the VISIONS Project through all four training cycles, September 1993 to December 1994. The principal means for the summative evaluation were a site visit, personal interviews of students at one site, interviews of a plant manager and supervisors, review of documentation (student and employer surveys), and review of the project's entire curriculum. Reference is made to previous cycles' Evaluation Reports with citations by Report number and page number and to the original VISIONS project proposal (June, 1992).

II. EVALUATOR ACTIVITIES:

A. Site Visit:

The major purpose of the site visit, January 24, 1995, was to interview the plant manager at United Technologies; to interview students and supervisors at TRMC; to interview the Project Director; and to collect project materials (curriculum, evaluation surveys, etc.).

B. Review of End-of-Project Information:

The Project Director provided summaries of supervisor evaluations, student evaluations, and employer satisfaction surveys, which were all reviewed in light of information gathered from discussions with students and supervisors.

C. Review of Formative Evaluation Reports, Cycles I - IV

The observations and comments included in the Evaluation Reports serve as the foundation for the concluding report. The areas of strength and concern noted in these reports provide the basic themes or areas of emphasis, the details of which bear repeating in light of the project's impact as a whole.

III. OVERVIEW OF PROGRESS: CYCLE I - CYCLE IV

The VISIONS Project at OCCTC is noteworthy in a number of areas. First and foremost, it represents an ambitious attempt to meet the needs of three very different workplaces--United Technologies (UT), The Regional Medical Center (TRMC), and Holnam. Each of these sites also had very different student populations, as noted in **Report III** (p. 2). Instructors at each site attempted to deal with a variety of existing needs, and the project as a whole demonstrated an ability to adjust to changing needs, new management, and staff resignations: over the life of the project, only one site (Holnam) kept its instructor--at UT, there were three different instructors, at TRMC, there were two. The counselor's role, which was never particularly strong during the project, was filled by two people. Given what employers saw in some cases as a lack of continuity, the Project Director was able to replace instructors and assist in the transition between instructors in an exemplary way. The Project Director was also very resourceful in overseeing the development of curriculum and persisted in promoting the project, even in cases of management indifference or lack of support.

The curriculum developed for the project is particularly noteworthy in its substantive approach to skill enhancement: in each case, the courses for each cycle were very much job-related; but more than that, they were intended to help each site in meeting its business objectives. The conception of the materials to be developed was marked by the promotion of improved understanding rather than a simple, discrete skill focus. Explanations of the relative lack of formal pre- and post-assessment (with standardized tests) were consistent with the needs of the participants and the nature of the curricular offerings. It was also obvious that instructors were trusted to act with initiative in gaining support for their classes from management at each site and in dealing with individual student needs.

It was clear that the project improved over the four cycles, with increased support from employers and with improved participation and retention. Perhaps the most telling factor of success is the fact that two of the three sites will be continuing activities begun by the project, with the third expressing a real interest in having additional classes supplied by OCCTC. The impact of VISIONS--on the lives of the participants and on the ability of these businesses to improve by investing in training --is very telling. The insights of the project staff and the products that they developed should continue to contribute to our understanding of what constitutes successful workplace education practice.

IV. AREAS OF EMPHASIS:

A. Recruiting and Retention:

As noted in **Report IV** (p. 1), the final cycle provided the greatest growth in participation and the best retention rates of any previous cycle and enabled the project to realize its enrollment goal. In addition, each site retained a loyal cadre of students: over the life of the project, around 50 students completed two or more cycles. TRMC maintained its distinction among the three sites as having the same students (7) in one or more classes over the life of the project; at Holnam, over half of the participants (14 out of 25) completed training offered in all four cycles, with a few attending both the CEMENT and the Basic Chemistry classes.

In follow-up interviews with what the project termed "persisters"--those who were enrolled for more than one cycle--students were asked why they attended class. Most of the reasons given by those interviewed had to do with self-improvement; very few were strictly job-related. Since the program was voluntary for the most part in the first three cycles, it is not surprising that the most important reasons for attending were personal in nature. It also appears to be the case that reasons for attendance did not appear to be limited to improving reading skills. Math was mentioned just as frequently, but more generally, there seems to be a consensus about the need for self-improvement--at work and outside of work.

Persisters also were asked about the support they got from friends, family, and supervisor to attend classes. There was no particular trend here, but it appears that support from one of these groups was important to the attendance and retention of these students.

Follow-up interviews were also conducted with some workers who never attended classes, even though they were aware of classes being offered. The reasons for not participating are just as revealing as those given by "persisters" for attending: with the program being voluntary, the

barriers presented by home responsibilities, work load, transportation were mentioned as factors for non-attendance. Given the lack of incentives in two of the three sites--as mentioned in **Report I** (p. 4) and **Report II** (p. 2), these barriers were sufficient to keep attendance low.

The major factors noted in **Report IV** (p. 1) for increased attendance were business requirements for SPC training at UT and the availability of short-term classes at TRMC. The ability of the project to attain its enrollment goal was in large part attributable to the increased participation at two of the three sites; the most significant increase (in terms of substance of course and percentage of workforce attending) was the Basic Chemistry course at Holnam in Cycle IV

One of the "lessons learned" from the VISION project's experience with enrollment increases in Cycle IV has to do with the impact of "incentives" versus making training mandatory "on the clock": the increases in participation seen at UT are directly tied to the $4,000 investment made by management's providing release time for SPC training. Basic Chemistry was also made a requirement by Holnam, with release time being given---this compared with the $10 per hour provided to those who volunteered for the CEMENT classes. In the case of SPC and Basic Chemistry, both firms saw the classes being tied to the long-term prosperity of the company; it is not clear that any of the classes at TRMC, the classes in Cycles I and II at UT, or the CEMENT classes at Holnam were viewed with similar seriousness.

B. Curriculum Development:

As noted above, the fact that two of the three sites--Holnam and UT--intend to continue the classes begun under the VISIONS project speaks to the value placed on the services provided. In addition, the curricular materials developed for this project can extend beyond the life of the project itself and be useful to the sites in Orangeburg as well as to other workplace sites around the country. Particularly impressive are the materials developed for use at TRMC:

- Increasing Vocabulary for Hospital Workers
- Numbers and Charts Course
- Strategic Reading for Hospital Employees II, Instructor's Guide
- Conflict Resolution Workshop
- Communication Skills Enhancement Workshop

The Project Director's orchestration of the professionally developed materials and their incorporation with those developed by site instructors are particularly noteworthy. The increased employer support for the project in its latter stages--particularly at UT and Holnam--was due in part to the substantive offerings that had broader application to the business goals of the industry and to a broader spectrum of workers. (See **Report IV**, p. 3, for more extensive discussion.)

At UT, the Blueprint Reading course (teacher developed) laid the foundation for the development locally of the SPC course; the Basic Chemistry course (locally developed) appealed similarly to management as the basis of the workforce's transition to new modes of manufacturing and work processes (cross-training, work teams, etc.).

These materials, as essential artifacts of the project, would enable outside observers to deduce much about the unique nature of VISIONS. In addition, with proper adaptation and field testing in other sites, they could be used in other workplace education projects. The key question that needs to be answered is how another site could use these materials with a wide spectrum of adult learners: since there was very little reliance on the use of assessment to determine the appropriateness of the materials (especially Blueprint Reading, SPC, and Basic Chemistry), it is not clear that the materials in their present form could be used for adults reading at lower levels. The difficulty of Blueprint Reading, for example, may have resulted in the high drop-out rate noted in **Report III** (p. 3): of the 37 originally signed up for the course, only 18 finished. With gifted, enthusiastic instructors and the proper kind of employer support, it is possible to teach difficult, content-rich material; but for the purposes of broader use in other sites, some estimate of the proper audience for such materials would need to be provided.

C. Course Evaluation:

1. Testing

(a) Competency-based Testing:

A recurring theme of all formative evaluations is a concern about the reliance on competency-based testing (see, for instance, **Report II**, p. 5; **Report III**, pp. 4-5): first, the highly specific context of each pre- and post-assessment instrument made it impossible to compare student gains across sites; secondly, the standards used by instructors to develop such assessments were also highly dependent on the student population being served; and third, there was no development of levels of mastery commonly associated with a competency based approach. In each case, sites could report pre- and post-test "gains", but it was impossible to tell whether these gains measured the "value-added" element of instruction. Most importantly, in terms of the Performance Evaluation Measures of the original VISIONS proposal, it is difficult to assess whether "90% of participants exhibited improved competence in listening, reasoning, and problem solving" as stated in June, '92 proposal, p. 30. (see discussion of this measure in **Report I**, p. 5).

(b) Standardized Testing:

The objective measures called for in the original VISIONS proposal (pp. 43-44) included "grade level gains" for non-high school graduates and completion of the pretest for the GED and gains of "at least 25% of job-specific skills for high school graduate production workers." As noted throughout the formative evaluation reports (most specifically in **Report I**, pp. 7- 10), the lack on any standardized test data makes it impossible to document the learning gains of VISIONS participants in any way commensurate with the stated objective measures of the original proposal. The proposed use of the Workplace Literacy Test (WLT) as a substitute for the Test of Adult Basic Education (with its emphasis on grade-level, academic measures) never materialized across the three sites. The use of the WLT at Holnam was continually postponed from one cycle to the next; to date, there is no evidence that it was ever given.

The lack of any standardized test data severely compromises the ability to generalize what the VISIONS project approach to contextual teaming (evident in curricular materials) has to recommend to similar projects. More importantly, it compromised the ability to measure the effectiveness of the project by site across cycles and across sites by cycle as part of a "continuous improvement process." Many reasons were advanced for why no such testing could be done, including company policies against testing, the inappropriate nature of the Workplace Literacy

Test for low-level readers, and the problems of scheduling the test. In the end, the lack of relevant data suggests that higher priority was given to other aspects of the project and that subjective measures from site management and from participants would be accorded more weight in evaluating progress and instructional impact.

2. Supervisor Ratings:

Given the lack of adequate measures for learning gains noted above, the project substantially relied on feedback from surveys of supervisors as a way of measuring program impact on job performance. These ratings do allow for comparisons across sites because of the same performance categories and survey questionnaires being used in each. What is not clear is whether or not the pre- and post-program surveys were conducted in the same way at each site. Also, since there were over 200 workers who participated in some form of instruction, it is not clear why all were not rated in some way by their supervisors. Reducing the universe of participants evaluated to the number attending in two or more cycles (the 50 "persisters" mentioned above) would have been one way of measuring impact more uniformly.

As it was, a total of 82 participants across the three sites were rated by their supervisors in the areas of Job Attitude, Productivity, Quality of Work, Attendance, and Job Knowledge. It is clear from these ratings that in two of the sites--UT and Holnam--that the program participants were perceived by the supervisors to have made real gains in Job Knowledge, Job Attitude, Productivity, and Quality of Work. A summary of these results by site is found below:

Job-Performance Gains as Measured by Pre/Post Supervisor Ratings

	United Technologies	Holnam	TRMC
Job Attitude:	66%	54%	9%
Productivity:	55%	42%	27%
Quality Work:	50%	42%	22%
Attendance:	11%	45%	18%
Job Knowledge:	50%	66%	13%

The results at TRMC were not as significant in terms of high percentage ratings, but could be explained in part by the way the supervisors were given the pre- and postprogram surveys--a factor that points to the need for uniformity if such surveys are to be used for comparisons across sites.

3. Participant Ratings:

The reliance of the project on survey data to document impact on students has been noted in previous reports (see **Report III**,pp. 5-6). At the end of the project, participants were surveyed to identify reasons that they attended classes. The findings of these surveys at each site are not surprising, given the comments of students at TRMC interviewed at the conclusion of the project.

Percentage of Participants Responding on "Very Important" Goals by Site

	United Technologies	Holnam	TRMC
Knowledge Goals			
- become better informed	86%	76.7%	83%
Personal Goals			
- advance in present job	86%	69.8%	77%
Obligation Fulfillment			
- meet educational standards	71%	62.8%	77%
- satisfy employer	57%	41.9%	55%
Personal Fulfillment			
-help child with homework	43%	46.5%	88%

There is a general consistency of responses across sites on reasons for attendance: advancing in present job in each site is rated as very important, as is meeting educational standards. The fact that meeting educational standards is rated in each case by a higher percentage of workers as very important compared to the percentage rating satisfying employer as very important suggests the linkage between meeting educational standards and advancing in present job. There appears to be a clear perception that improving educational skills will lead to advancing in the present job, and that this is seen as an objective connection: "satisfying employer" would then appear to be a by-product of participants increasing their skill levels.

Also worthy of note is the rating given to helping children with homework. In the case of TRMC, this stands out as a personal fulfillment goal and receiving almost twice a high a percentage rating as the same goal received at UT and Holnam. This suggests that the instruction received at TRMC was more likely to result in transferable skills compared to the more technical offerings at Holnam (Basic Chemistry) and Blueprint Reading or SPC at UT. The difference in rating could also be explained by the demographic makeup of the respondents at each site.

4. Employer Satisfaction:

The survey instrument used to gauge the perceptions of program impact appears to be a generic form used by OCCTC in all of its training programs. As such, it does not elicit specific observations about the project. Also, it does not appear that feedback was sought continuously through the four training cycles. It seems to have been reserved to the conclusion of the project to have employers rate the overall effectiveness or program impact. Given the importance with which the original VISIONS proposal accorded to employer evaluation in verifying objectives and cumulative results (p. 43), this survey instrument and its results do not appear to provide the information required (see discussion of this important point in Report 1, pp.8-9). By contrast the supervisor ratings information does appear to be very much in line with the goals and objectives of the original proposal.

In personal interviews of senior management at two sites--Holnam and UT--the project received very strong endorsements. The nature of these endorsements had much more to do with the general "fit" of the course offerings in the latter stages of the project, specifically the Basic Chemistry course and the Blueprint Reading and SPC courses. It is not clear, therefore, that the improvement

of basic skills per se would have led management at either site to pursue further training or continue the current offerings (such as the CEMENT classes at Holnam).

IV. FINAL COMMENTS:

One mode of final evaluation is to ascertain in what respects the project's goals, as stated in original proposal, have been met or not met. Another mode would be to look at the project in more global terms and focus upon the evolution of the project as it met or failed to meet customer requirements. Yet another approach would be to look at how information gathered at the end of each cycle (e.g., competency-based testing) or provided in formative evaluation reports was used for "continuous improvement."

The second approach appears to put the VISIONS project in the proper context under the circumstances within which it operated. The lack of continuity in two of the three sites has been noted: three new instructors and one counselor had to be hired at various points in the project. Management changes at UT and at TRMC had profound effects upon the project: in terms of employer support, the new management at UT has valued the instruction offered and remains committed to continuing the program; at TRMC, the turbulence caused by the management change meant that information about the project and its progress did not flow through the proper channels--resulting in hospital management's being unaware of when the project was ending and their surprise at not being included in OCCTC's new workplace literacy grant proposal. To the Project Director's credit, the instructional offerings increased in quality over the four training cycles, the retention rate improved, and enrollment increased significantly in the latter stages.

Looking at VISIONS in terms of its original goals, three points need to be made: first, the absence of standardized testing (as noted above) precludes the linkage of learner gains to customized assessment gains and to supervisor ratings of participants' job performance; second, there was never any use of tutors or a central learning laboratory nor was there an on-going provision of support services (both of these deficiencies were noted in **Report I**, pp.6-7); and third, the measures of program impact used for employer evaluation (with the exception of the supervisor surveys) were not consistent with those proposed.

From the "continuous improvement" perspective the project can be looked at in terms of how it incorporated information from each cycle's evaluation into the offerings and operation of the next cycle. Here there appears to have been a case of setting priorities of treatment: obviously, meeting the projected enrollment goal and increasing retention rates were given greater weight than figuring out how standardized testing could be accomplished. Making adjustments to curricular offerings, particularly at TRMC, made the customer much more satisfied with the program--to the point that management now wants to have similar classes offered beyond the life of the grant. The fact that, however, recurring mention was made in formative evaluation reports that elements of the original proposal were going unfulfilled--specifically, the uniform measurement of teaming gains--and no action was taken to remedy the situation suggests that these parts of the project were given little importance.

To a certain extent, the ways in which the VISIONS project improved over time--in employer support, in participation, and retention--can be attributed to the flexibility of the staff and to the high quality of the curricular offerings. These elements of the project deserve to be emulated in future workforce education projects. The shortcomings, as noted and documented over the life of

the project, should not be viewed in any way as compromising the many contributions of the project.

The project's progress and outcomes do raise issues about the relative place of basic skills in workplace education programs. The question resolves itself to this: given the choice of content-rich and technically-oriented programs (such as SPC, Blueprint Reading, or Basic Chemistry), is it likely that employers will choose to support basic skills classes? The low enrollment during the first two cycles and the lack of employer support at two of the three sites appears to answer the question: when the focus was basic skills education alone, there appears to be little reason for employers to support or workers to participate; when the courses are much more related to business goals and contain a greater knowledge component, there will be greater likelihood of business support in terms of release time, adequate facilities, and mandatory attendance.

The VISIONS project has added to the national discussion and research base in a number of ways, with materials and with insights from its capable staff. National dissemination efforts should take advantage of those insights in suggesting ways in which other workforce education programs might be structured to attract business support and maximum participation of front-line workers. With its inclusion in the three-year grant program about to begin, there will be ample opportunity for OCCTC project staff to apply the valuable "lessons learned" to improve the competitiveness of area businesses and the skills and knowledge of the local workforce.